Issue 99 ■ May ■ 1996 ■ £4.50 Overseas price £4.50 Hfl 20

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Magic User Interface 3.3

The most popular Amiga shareware program ever!

May 1996

AMIGA COMPUTING

Requires Hard Drive, WB 2.04, 2Mb RAM

MUI 3.3



Try out the *latest* unregistered version of this *essential* Workbench upgrade!

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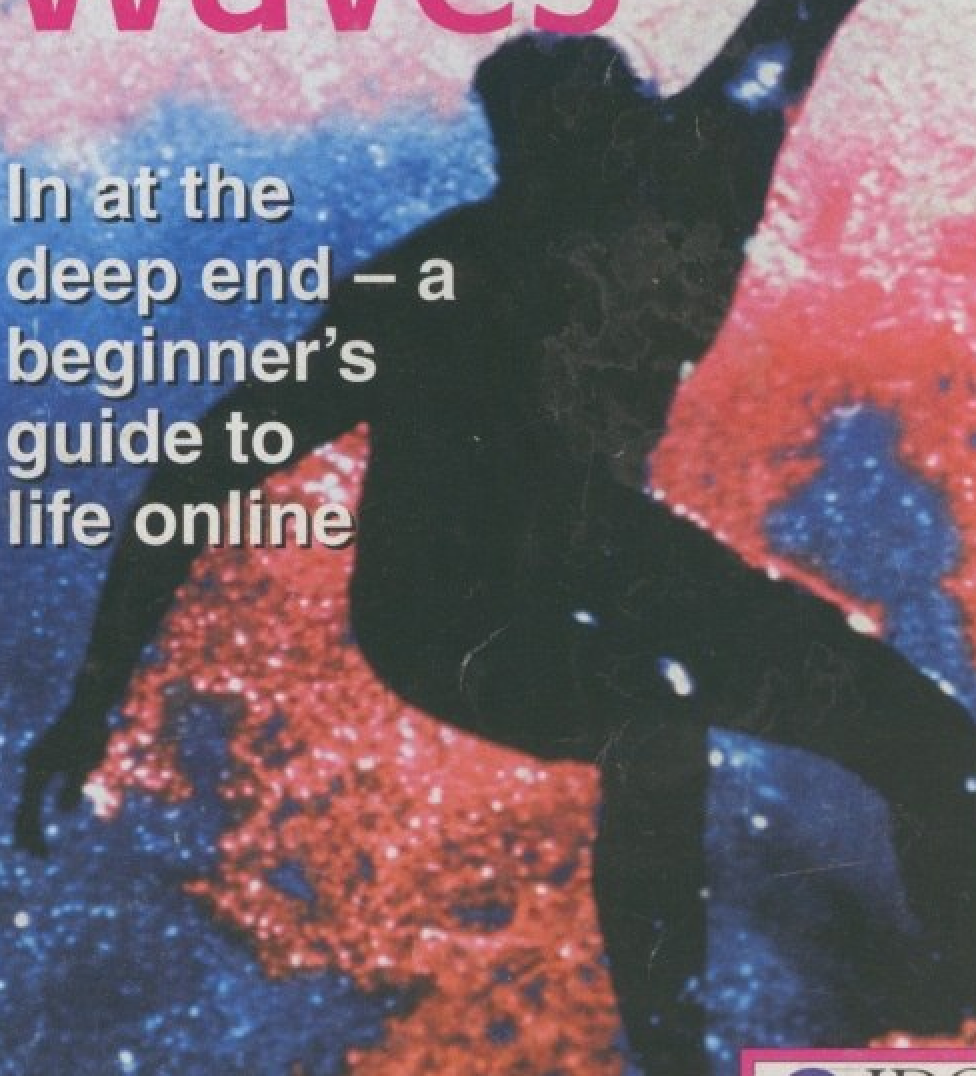
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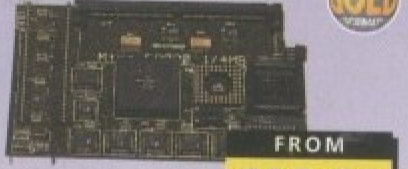
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SCSI hard card which can fit 8MB of RAM on-board.

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Award winning Amiga Genlock.

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ioEXTENDER **£69.95**

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Official GVP RAM SIMMs.

4MB GVP RAM	**£159**
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A 68060 accelerator board for the A2000 running at 50MHz and allowing upto 128MB of user installable memory and a SCSI-II hard disk controller.

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HI-SOFT

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AURA	**£79.95**
MEGALOSOUND	**£29.95**



squirrel scsi interface included where you see this logo

SURF SQUIRREL

Surf Squirrel offers an even higher SCSI performance, auto-booting, and ultra-fast serial port. Surf Squirrel is the ideal expansion peripheral for your Amiga 1200. Please call for more information.

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PLEASE CALL IF YOU HAVE ANY QUERIES

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512K RAM WITHOUT CLOCK	£19.95
A600 1MB RAM	£39.95
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Increase your Amiga 500/2000 chip RAM to a total of 2MB. MegaChip does this by using its own 2MB RAM and also now includes a 2MB Fat Agnus. No soldering is required.

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A500 68020EC

A 68020 EC processor accelerator card for the A500 and A500+, with an option to fit a 68881 or 68882 co-processor (PLCC or PGA). This card can fit upto 4MB FAST RAM and is fully auto-configuring.

NOT COMPATIBLE WITH GVP HARD DRIVE

A500 68020 EC 0MB RAM	£99.95
A500 68020 EC 4MB RAM	£189.95

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PICASSO II 2MB RAM INCLUDING TV PAINT JNR.	£249.95
PICASSO II 2MB RAM INCLUDING TV PAINT 2	£399.95
VIDEO DAC 18-BIT GRAPHICS ADAPTOR	£25

VGA ADAPTOR

VGA ADAPTOR £15

GLIDEPOINT

Intuitive cursor control at your finger tips ,'Tap' for an instant selection. Connects to the Serial port. (This is not a graphics tablet)

ALPS GLIDEPOINT £59.95

GENIUS TABLET

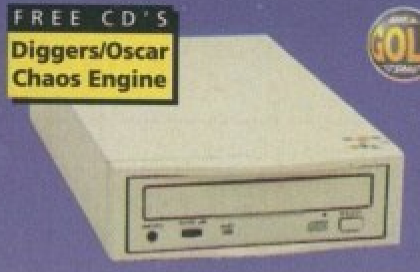
High resolution pen and cursor controlled graphic tablet, including cables and software. Power Template software includes templates for DPaint V, DPaint IV AGA, PPaint 6.4. What's more you can create your own templates using this software (for any 2.0/3.1 compliant software). When using the cursor it will emulate a 3 buttoned mouse.

GENIUS TABLET 12 X 12 ... £195.95
INCL. PEN, CURSOR AND POWER TAB/TEMP S/W

GVP GURU-ROM V6

A SCSI driver for all Series II host adaptors and accelerator cards for all Amiga computers. Please call for further information. For GVP Only.

GURU-ROM V6 .... £49.95



POWER CD-ROM

The Power CD-ROM for the Amiga 600/1200 plugs directly into the PCMCIA port and provides a direct SCSI-I and SCSI-II interface, allowing up to six additional devices to be connected. What's more the Power CD-ROM features a 'Hot-plug' which allows you to connect and disconnect the CD-ROM and any other additional devices even when the Amiga is switched on.

The CD-ROM drive comes with a SCSI interface, PSU, manual, audio lead, mains lead and software which includes Audio CD, CD32 Emulator, MPEG Film Decoder and Photo CD.

AMIGA 600/1200

x2 SPEED CD-ROM INC.SQUIRREL	£179
X4 SPEED CD-ROM INC.SQUIRREL	£249

AMIGA 4000

DUAL SPEED CD-ROM EXT.	£139
QUAD SPEED CD-ROM EXT.	£199
AMIGA 4000 SCSI-INTERFACE	£129
SCSI CABLE	£10

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Scan in 24-bit at upto 200DPI (all Amigas not just AGA)*, Scan in 256 greyscales at up to 400DPI (all Amigas), Thru'port for printer connection, Fully supports AGA chipset, Display HAM8/24-bit images on a non-AGA Amiga (via image conversion), full editing facilities included. Works with 2.04 ROM or above, min 1MB (recommend 2MB).

POWER SCAN 4 B/W	£89.95
POWER SCAN 4 COLOUR	£169.95
OCR (BOUGHT WITH SCANNER)	£20
OCR SOFTWARE	£49.95
POWER SCAN 4 S/W ONLY	£20
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PC INTERFACE + B/W S/W	£39.95

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24-bit A4 flatbed scanners, complete with software, cables and manual.*

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EPSON GT-8500 24-BIT, INC. POWERSCAN SOFTWARE	£579.95
EPSON GT-9000 24-BIT, INC. IMAGE FX REV. 1.5 SOFTWARE	£729.95
ADPRO SOFTWARE	£149.95
IMAGE FX 2.0 S/W	£149.95

SCANNER SOFTWARE

FLATBED POWERSCANNER S/W .. £35
WORKS WITH ALL EPSON FLATBED SCANNERS

AMIGA SUPERSTAR · GOLD · AWARD

68040/060

FALCON 68040RC 25MHZ	£399.95
FALCON 68060RC 50MHZ	£649.95
4MB SIMM	£89.95
8MB SIMM	£189.95
16MB SIMM	£399.95
FALCON NO CPU	£349.95
SCSI ADAPTOR	£29.95

All Falcon's come complete with a cooling fan

VIPER 28MHZ

The Viper 28 can have up to 128MB RAM installed, full Kickstart remapping, optional SCSI-II adaptor, on-board battery backed clock, 68882 co-processor optional, instruction and data burst modes.

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VIPER 28 MKII 2MB	£179.95
VIPER 28 MKII 4MB	£199.95
VIPER 28 MKII 8MB	£299.95
VIPER 28 MKII 16MB	£489.95
VIPER MKII SCSI ADAPTOR	£69.95

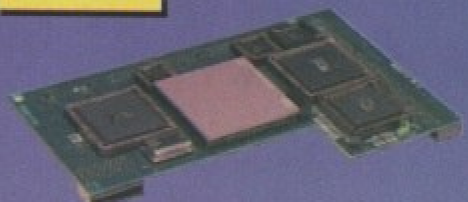
VIPER 50MHZ

The Viper 50 can have up to 128MB RAM installed, and the same features as the Viper 28.

VIPER 50 BARE	£199.95
VIPER 50 2MB	£269.95
VIPER 50 4MB	£289.95
VIPER 50 8MB	£389.95
VIPER 50 16MB	£599.95

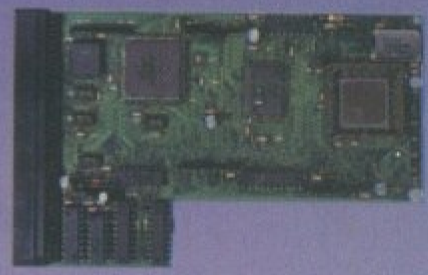
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FALCON



STARTING FROM
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VIPER



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FPU's complete with crystal. Please state for Blizzard compatibility.

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40MHZ FPU PLCC	£60.95
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PC1208 8MB	£249.95

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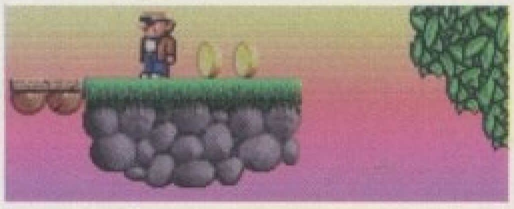
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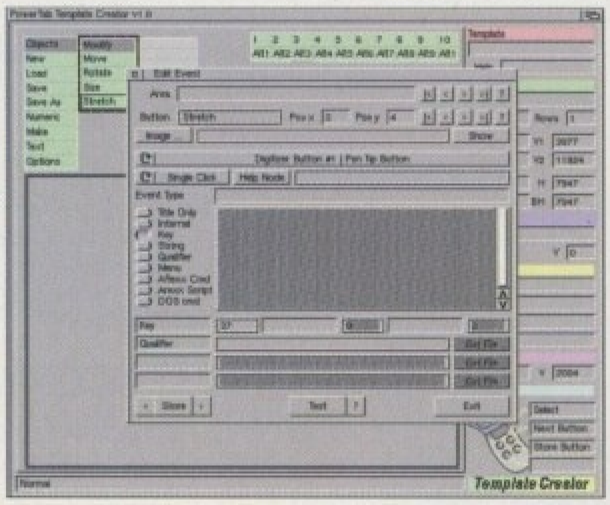
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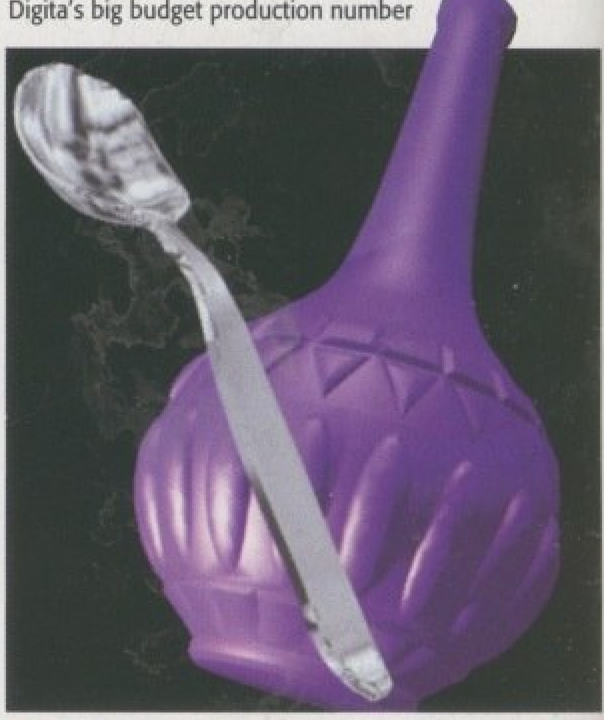
SYSTEM





REVIEWS





FEATURES



THE COVERDISKS

MAGIC USER INTERFACE 3.3

The ultimate in graphical user interface enhancement, and an essential system add-on for all Amiga Internet users. This unregistered version will allow you to run every MUI program, faster than ever before



TOOLED UP

Try out MUI with a selection of the most useful MUI utilities, along with the usual collection of up-to-date tools including:

Lottery, Disk Squeeze, MUI Screen Mode, Startup Control, Scheduler, AmiCDFS 2.4, UCBackup, Mad House, Scout 2.6, Dialer, Update Libs, WBStartup+



COVER STORY



Neil Mohr guides, as gently as possible, the innocent Interneter through the trials and tribulations of getting online with the Amiga

REGULARS

AMIGA GUIDE

NEARLY DOUBLES THE SPEED OF THE A1200

CLOCK CARTRIDGE



Our unique and highly rated external Clock Cartridge will enable your Amiga to continually store the correct time and date in its own battery backed memory.
Simply plugs onto the back of the Amiga and does not invalidate the warranty.
Compatible with ALL Amigas

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A1200 trapdoor fitting memory expansions feature a battery backed clock and a socket for an accelerator FPU.

2mb £99.99
4mb NOW ONLY £134.99
8mb NOW ONLY £259.99

A500 & A500+ HARD DRIVES



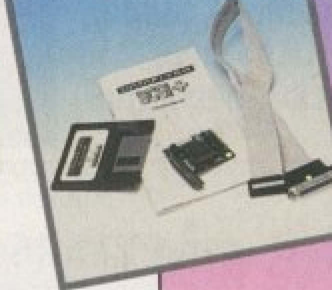
These hard drives simply push onto the side of the A500 or A500+ and will give your computer all the benefits that hard drives offer. The drives are supplied formatted, partitioned and have Workbench installed for immediate use.
Full instructions and software supplied.
The hard drive also has the facility to add 2, 4, 6 or 8mb of RAM inside It.

A500/+ 250mb HARD DRIVE £209.99
Additional RAM for the hard drive £89.99 per 2mb

DATAFLYER SCSI+

Now includes CD ROM drivers and instructions.

The Dataflyer is a 16 bit SCSI II controller card that converts the signals on the internal IDE interface to also run SCSI devices at the same time as the IDE hard drive.



The Dataflyer SCSI+ will operate upto 5 SCSI devices such as CD-ROMS, hard drives, SyQuest removeable drives, tape back up drives etc.
Unlike other SCSI interfaces, the Dataflyer SCSI+ is compatible with all known accelerators etc and it does not stop you from utilising any of the important expansion ports on your A1200/A600.
The Dataflyer SCSI+ easily installs into the A1200/A600 (simply pushes in, no need to remove the metal shield) and provides a 25 way D connector through the blanking plate at the back of the A1200.
Full instructions and software supplied.

DATAFLYER SCSI+ ONLY £69.99
SQUIRREL SCSI INTERFACE ALSO AVAILABLE £59.99
PCMCIA fitting SCSI interface

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Discology is the ultimate in disk copying power for the Amiga. The package comprises the Discology Disk, manual and Discology cartridge for making copies of heavily protected programs with an external disk drive. Discology will also format disks, check disks for errors etc.
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AMAZING SPECIAL OFFER

£19.99 EACH OR BUY BOTH FOR £24.99

NEW FOR 1996

EZ DRIVES



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THE ULTIMATE REMOVABLE DRIVE

ONLY £199.99
or £239.99 with a Squirrel or Dataflyer
135mb EZ cartridge £15.99

ANTIVIRUS



Anti Virus Professional is the most powerful tool for detecting and removing viruses. Anti Virus pro will check and device hard drives, floppy disks and *even CD ROM drives* for viruses. Very straight forward to use, includes a full 50 page manual.
ORDER NOW BEFORE A VIRUS DESTROYS YOUR SYSTEM !!!
PLEASE PHONE FOR A FULL INFORMATION SHEET

NEW FOR 1996

DATA FLYER 4000SX

A4000 SCSI controller expansion card that allows up to 7 SCSI devices to be connected to the A4000. Includes full user manual and installation software including CD-ROM drivers. Includes connecting cable for internal SCSI devices and rear mounting bracket with a 25way connector for external devices.

DATAFLYER 4000SX ONLY £59.99

SIMMS AND FPUS



72 pin simms suitable for Apollo accelerators, A4000, A1200 memory expansions etc.

1mb £39.99
2mb £77.99
4mb £99.99
8mb £159.99

33mhz 68882 FPU (plcc) £49.99
40mhz 68882 FPU (plcc) £69.99
50mhz 68882 FPU (PGA) £79.99
All FPU's are supplied with crystal oscilators

NEW FOR 1996

ASIM CDFS 3.0

This superb package is a must for any CD-ROM user. Includes CD32 & CDTV emulation, audio CD player software including librarian features, Direct reading of 16bit audio samples, full support for Kodak and Corel PhotoCD Discs. Includes the 'FISHMARKET' CD-ROM disk packed with public domain Fred Fish disks and a huge 115 page information packed spiral bound manual.

ASIM CDFS ONLY £49.99

amiga comment

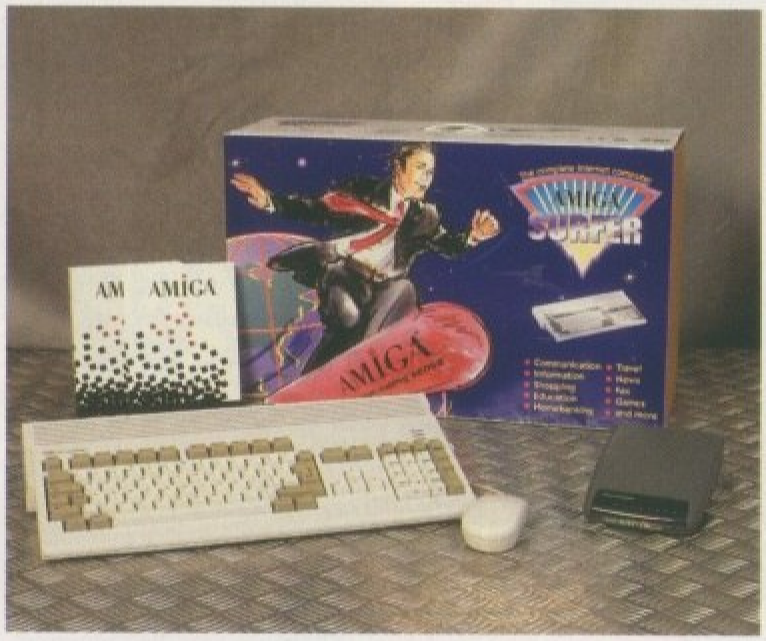
Killing ourselves

Does bundling software or putting it on coverdisks kill the market? Ben Vost thinks so

It has been said before. It will be said again. The Amiga market has itself in a stranglehold. No-one else is killing our machine but the users, companies, and publishers that are supposed to be supporting it.

We all think the software bundle that accompanies every Amiga these days is the best yet, a smashing set of products, but the only problem with giving away all this nice software is that it reduces the chances that anyone will bother to buy anything else. If you supply a machine with everything its owner is likely to need, where's their incentive to go and spend some more money?

Sony themselves said that they purposely didn't bundle any software with their PlayStation console for the specific reason of getting people to fork out more cash for something to play on it. And everyone knows that in the console game, software is where the money is made. Perhaps future bundles should concentrate more on shareware products or ones that definitely don't fulfill the potential of the machine. This might also cost a lot less for AT than market leaders would, thus saving some cash for R&D or perhaps adding in a larger hard drive.



Ripped off

Magazine publishers are as much at fault with a seemingly endless stream of full product coverdisks that will soon dry up as publishers realise they will get no further revenue from sales to end users. This approach also alienates the end users who have paid good money for a product, only to find it for free on the front of a magazine six months down the line. Now I don't subscribe to the theory that these people have been ripped off – they've had six months of usage out of that program, they have proper documentation and (possibly) support and a firm upgrade path – but there are those that do.

We at *Amiga Computing* have pretty much (only pretty much) given up on the idea of selling our souls for a quick buck as we have realised that the demise of the Amiga market can only be accelerated by such behaviour, and we are concentrating on offering our readers the best demos of new products or registered shareware which actually helps the Amiga community, or even our collection of utilities from Aminet and elsewhere. After all, some blame must be laid at the publishers' doors for entering into the deal with the magazines for their products anyway.

If they were more willing to create demos of their products rather than simply dump out old versions, readers could get a look at new software and then, and here's the secret, go out and buy it... ...provided, of course, they can still find someone who sells Amiga software. Retailers are never happy to see something they have in stock appearing on the front of the magazine because it means they have wasted money on stock that is never going to be sold – perhaps this is another reason there are so few dealers willing to stock Amiga software any more.

I'm not asking anyone to boycott magazines that put full software on their covers, that would be unrealistic. But unless something changes in the very near future, there won't be any more programs to put on coverdisks because the publishers will have gone down the pan, the users will have sold their Amigas, and AT will be left holding stock of thousands of unwanted Amigas for which there is no market. Just thought you ought to know... AC

Ben Vost
Editor

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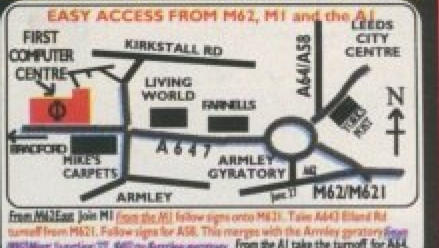
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Animations (Double)	£17.45	New!! Sci-fi Sensations	£17.95
New!! Artworx	£8.95	Space And Astronomy	£16.95
New!! Assassins 2 (Double)	£17.45	New!! Speccy Sensations II	£17.45
BCI Net 1/2	£8.95	The Beauty of Chaos	£13.45
New!! C64 Sensations	£16.45	Ten on Ten pack (10xCD's)	£37.95
CAM (Double)	£22.45	New!! UPD Gold CD (4xCD's)	£24.95
CDPD 1,2,3 or 4	£8.95	New!! World Of Pinups 2	£14.95
Demo CD 2	£8.95	WPD Hottest 5	£17.95
New!! Eric Schwartz CD	£24.95	Weird Science Fonts/Clipart	£8.95
New!! Encounters UFO Phenomenon	£14.95	Weird Science Animation	£16.95
Fractal Universe	£17.45	New!! World Info 95	£34.95
New!! Global Amiga Experience	£24.95	New!! XiPaint V3.2	£39.95
Goldfish 1/2	£24.95	New!! Zoom II	£18.95

FREE!! Prima Shareware CD-ROM worth £10 with every order of CD-ROM software over £30

Blitz Basic
Special Offer

Blitz Basic2.1
Popular BASIC programming language for all Amiga's
Special offer **£29.95**

Citizen ABC
Special Offer

As easy to use as ABC 24 pin colour printer
Usual price £145.99
Limited special offer price only!! **£135.95**

Turbotech
Special Offer

Turbotech Real/Time Clock cartridge
Usually £17.99
Special offer price **£14.95**

FirstNet

FIRST NET

Yorkshire's Premier Internet provider
One time connection fee of £29.38 and then just £14.69 a month thereafter, 15:1 User Ratio, Excellent Bandwidth, Web space available.
Call for further details

news

By **Tina Hackett**

SHOW TIME

More news from the World of Amiga is that Zeus Developments will be launching a new bulletin board software package for the Amiga. Called Zeus, it will support links to the Internet and users can be allocated e-mail addresses, read UseNet, and download files from the Amiga software directory. The package contains industry-standard communications protocols such as Hydra, RIP Graphics, IEMSI Logons. Zeus's Nick Loman commented: "Zeus contains a revolutionary new communications standard for the Amiga which features an attractive graphical user interface, sound and vision capabilities, and an increased operating speed."

ANORAKNOPHOBIA

Be proud to be a computer anorak. Or that's the message Channel Four are trying to get across in their latest documentary series. Called 'Triumph of the Nerds', it tells the story of two techies who outwitted the major players in the computer industry to make multi-million pound businesses. Presented by PC columnist Bob Cringely, it shows in the first programme 'Impressing Their Friends' the beginnings of the personal computer industry.

The first in this three part series also shows how a Californian company invented the microprocessor and another group from New Mexico creating the first personal computer. 'Riding the Bear' is the next in the series and sees IBM entering the market, and the final programme, 'Great Artists Steal', is how Bill Gates developed the Windows system in competition with Macintosh.Triumph of the Nerds will be screened this April and is made by John Gau Productions and Oregon Public Broadcasting for Channel 4.

TRUE COLOURS

Over the last few months Pragma have released two new products worth a mention. They are the new range of ColorQ colour copier interfaces, the ColorQ E4000 and E5000. Both use ColorQ's diamond press compression technology. Doug Barnwell, Divisional Manager for the ColorQ, commented

"When we first saw the new models with diamond press compression technology it was immediately apparent that the speed advantage was tremendous, allowing ripping of colour images in continuous tone of up to a tenth of the conventional size." Pragma also distribute Printronix products in the UK and as such announce the launch of the new 5000 series line matrix printers which promise new low costs. Pragma state that this has been achieved by ensuring all models use common parts, with only the hammer shuttle assembly different to each printer.

The necessary intelligence has been incorporated onto the shuttle assembly and has therefore reduced the number of parts for each machine.

LIGHTS, CAMERA, ACTION

More news on the World Of Amiga (all set to happen at the Hammersmith Novotel on 13-14 April) is that Epic Marketing will be showing their new CD-ROM designed to help out budding film makers. Showing Volume One of what will be a series is Special FX which shows movie makers how to produce good, low-cost special effects. All the titles and video effects have been produced on an Amiga and each CD will show a short film using the effects and then go on to explain how it was done. The CD will be priced at £29.99.

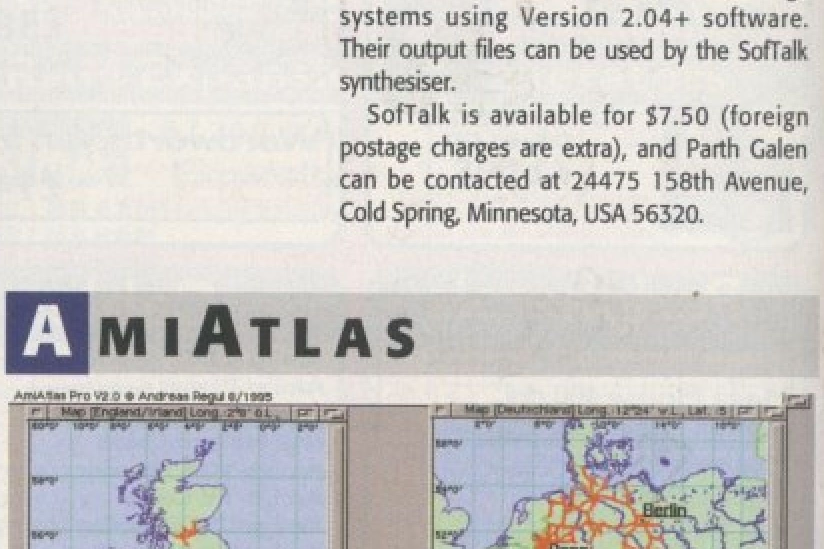
TALK TALK

American company, Parth Galen Software, have released three programs to provide synthetic speech for the Amiga. The first product, called SofTalk, is a fully compatible replacement for the original Amiga speech software and as well as having basic voice output for existing programs, it provides up to four channels of voice output. SofTalk is a programmable synthesiser and also has a range of speech effects which can be accessed by newer programs.

Parth Galen have also released TransMaker which allows text-to-speech translation for any language, and PhonMaker which lets the user design voice phenomes. Both TransMaker and PhonMaker cost $47.50 and run on Amiga systems using Version 2.04+ software. Their output files can be used by the SofTalk synthesiser.

SofTalk is available for $7.50 (foreign postage charges are extra), and Parth Galen can be contacted at 24475 158th Avenue, Cold Spring, Minnesota, USA 56320.

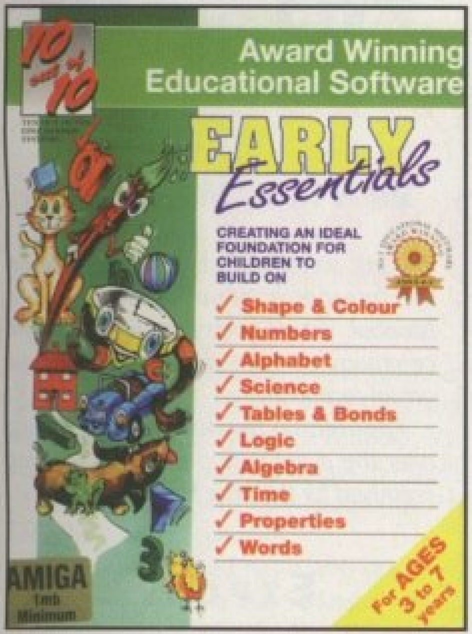
AMIATLAS



Roll up, get your AmiAtlas

Following our AmiAtlas review we've had various enquiries asking where you can actually get the product from. So here it is:
Andreas Regul, Gutenbergstrasse 5a, 64289 Darmstadt, Phone +49 (0)6151 718950.

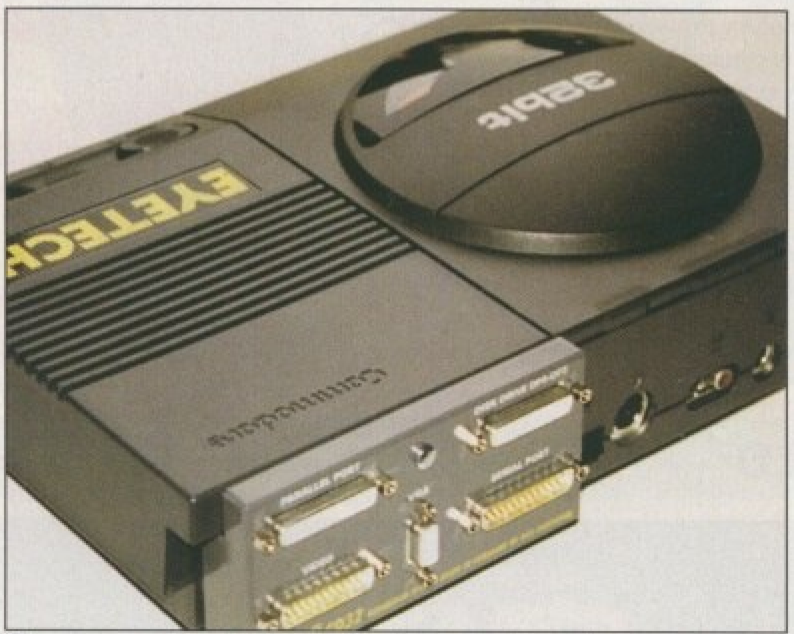
10/10 FOR GUILDHALL



10/10 Software, makers of many an educational title, are making their products available though Guildhall Leisure. The Guildhall name may ring a bell amongst those who browse our games section as the company have had great successes with titles such as Gloom from Black Magic and Super Skidmarks from Acid Software.

The range of software from 10/10 has been re-packaged and is now available for £14.99. Their current titles include Essential Maths and Early Essentials, but more are on the way such as Essential History aimed at the 5 to 12-year old and Essential IT for all ages.

CD32 SOLUTION



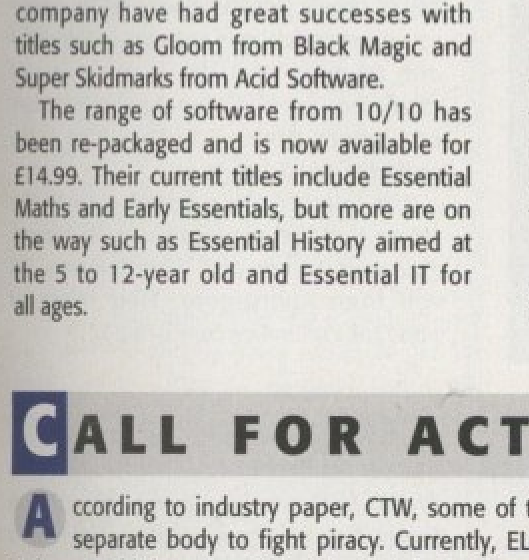
The new SX32 from Eyetech provides a portable multimedia solution

Eyetech have announced their plans to make the best out of the CD32. Disappointed by the lack of expansion facilities and input/output connectors, they are now releasing the SX32 expansion unit to provide a portable Amiga solution with built-in CD-ROM. Claiming to be 'everything the SX 1 should have been' it fits in the CD32's FMV slot and incorporates the Amiga serial, parallel, video and floppy disk connections. As well as having a standard 15-pin VGA monitor connector, it also allows the addition of a 2.5 inch hard disk drive and a 72-pin SIMM within the CD32. Eyetech believe that as the SX32 only sticks out 1 centimetre more than the normal CD32, and because of it's sturdy attachment, it makes it an ideal portable, low cost, multimedia option. The compatible keyboards and floppy disk drives are also available from Eyetech. The SX32 comes with a Workbench 3 CD which also has various utilities and PD/Shareware programs. The SX32 is £199.95, the Compact Amiga Keyboard, £34.95 and External floppy disk drive £44.95 (UK prices). Contact 01642 713185.

CALL FOR ACTION ON PIRACY

According to industry paper, CTW, some of the big games firms are calling for a separate body to fight piracy. Currently, ELSPA (the Entertainment and Leisure Software Publishers Association) have their Anti-Piracy Crime Unit dealing with the problem. However, following the recent news that the Police and Trading Standards could refuse to take action against pirates unless the industry actually provides more resources themselves, some of the major players are suggesting that ELSPA's Anti-Piracy Unit is made into an independent body.

This, they believe, will make the industry more focused on the problem. ELSPA answered by saying that the suggestion had not been thought out properly and that the Crime Unit worked as a standalone organisation anyway.



TOWERING ABOVE

Blittersoft have a new range of Amiga Tower systems and expansion Shuttle boards available.

The standard Tower has a choice of several front panel designs and uprated PSUs are available in 230, 250 and 300W ratings. Shuttles available are the Shuttle 2000, 1200, 1200PCI, 3000, 4000 and the 3000PCI and 4000PCI.

News also from Blittersoft this month is that they are now the exclusive distributors of products from Canadian company, AsimWare Innovations Inc. Blittersoft will also be releasing MasterISO from AsimWare Innovations, a program which allows the user to create an ISO image which can be written to a CD-ROM recorder in order to create custom CD-Rom and CD-Audio discs.

Catch our review of MasterISO next month, with a roundup of CD-ROM Recorders.

news snippets

FREE BEER

Now we have your attention, we just want to say thanks for the great response we've had to our Reader Surveys. Still keep them coming though – there's no free beer (that was a cheap trick) but there is £200 worth of software and hardware tailored to your computer's needs up for grabs.

We'll put your surveys into a draw and the lucky winner will be announced in our 100th issue. All your entries must be received by 6 April, so send them to Reader Survey, Amiga Computing, Media House, Adlington Park, Macclesfield, Cheshire SK10 4NP.

ON THE MOVE

Amiga distributors SDL have announced that the company are set to move to new premises in Woking. SDL, which also incorporates the retail chain Silica, were recently saved from financial strife by a take over by the Anglo Corporation.

The move will mean expansion for the company as the new site is around 10,000 square feet bigger than their current premises. However, although all the current staff have been offered jobs at the new site, it's thought that some staff may not wish to relocate.

LORD OF THE FLIES

Congratulations to Ben Vost, our Pog-collecting Deputy Editor, who has been promoted to the role of Editor. Vost was too emotional to comment at the time but has since been sighted wearing big black boots and brandishing a whip

SIGN OF THE TIMES

A recent article in The Times Interface computer section hailed the Amiga as "the leading games machine and now one of the foremost multimedia home computers" in their recent article announcing The World of Amiga Show. Praise indeed.....

SCALA OOPS

While we may have been on the ball in getting you Scala's new phone number in the UK, we didn't actualy give you the right number.

The number you need to phone is actually 01920 484811, and it is their fax number on 01920 484148, in case you need to fax them.

VIDEO STAR



London company, Connections, have a solution to your video making problems. If you can't afford the equipment or you don't know how to make a video, then they are offering a range of services to help. Various training courses are available with free offers for the unwaged. You can also hire the equipment which includes Lights-Sound-2, Machine S-VHS and three Machine Beta Cam Edit facilities, Vision Mixer and Computer Graphics. Connections are based in Hammersmith and can be contacted on 0181-741 1766.

Find out how to make a video at London-based Connections

DISKO INFERNO

For those interested in home or professional video production, you may like to know that Diskotech have announced the release of their new collection of animated titling fonts. Following on from the original MovieFonts, it works with all Amigas with 1Mb using Deluxe Paint or similar. Available as a 10 disk pack, MovieFonts 2 costs £40 and contains 18 original colour fonts which share the same palette for mixing and matching without colour conflict. The set is available now from Diskotech, Melin-Y-Garth, Builth Wells, Powys LD4 4AW.



MovieFonts 2 is now available for both home and professional video users

ESCOM JARGON FIESTA

We've recently received a news release from Amiga Technologies regarding Escom's shares. After ploughing through all the jargon, the gist of it is that Escom have now got some more funding but have had to give up some control in terms of shares...we think.

Apparently, ESCOM AG have increased their capital with a cash outlay of DM59,994,000. Escom explained: "The new shares have been taken over by Commerzbank AG for the issue consortium and will be offered to shareholders at the earliest possible date after presentation of the 1995 annual report.

The increase in capital is part of an agreement between the company, its associates and bankers by which the company acquire new resources amounting approximately DM100 million." Manfred Schmitt, the principal shareholder in ESCOM AG, has transferred 16 per cent of the base capital to the BV Beteiligungsgesellschaft GmbH, a subsidiary of the Bayerische Vereinsbank AG, and a further 2.5 per cent of the base capital to Siemens Nixdorf Informationssysteme AG. This in effect means that Schmitt's share has been cut by nearly 30 per cent.

The company gave this official statement: "By this action shareholders and banks have created the right conditions to give ESCOM AG a more solid financial base and an extension of its circle of shareholders enabling it to develop its business successfully."

news from the net

WHITE WEBBING

The first wedding to be broadcast live on the Internet is about to take place in Istanbul. Virtual guests can link up for the ceremony or even chat to guests at the actual reception.

Apparently, the site will be running after the event with a Baby Album being promised for the near future!

EXPOSED

A new initiative has been set up to allow the public to use the Internet as an anonymous way of blowing the whistle on any dangerous or illegal practices that are being covered up. The team behind it, called simply Whistleblowers UK, is made up of journalists and industry people who aim to make the site a safe way of employees speaking out against employers, where previously they had little protection for doing so.

The Internet site is based outside the UK so that the sender cannot be traced. Post your worries and Whistleblowers UK will then investigate. Find them at http://uk-commerce.com/whistle/

OFF THE RAILS

British Rail are joining the Information Super Railway by launching their own Web site. Called British Rail International, it will have information including major rail networks in Europe with plans to include accommodation and restaurant advice.

The pages cover UK, USA, Europe and Rest of World and by clicking on the country you are in, you can then access various options to get the required info, whether it's booking details, prices or routes. BR are stationed at http://www.britrail.co.uk

LATEST FROM CLOANTO

Cloanto are gearing up their products for the Internet as their Personal Paint 6.4 is included in the Amiga Internet Surfer Pack. They claim that Personal Paint proves ideal for Web publishing as it offers professional colour reduction, dithering, quantization and antialiasing algorithms. The package also supports new Web graphics formats such as PNG.

Check out the Aminet and Compuserve for Cloanto's new GIF I/O module ('personal_gif_io.library' version 5.0) for their Personal Paint package which they've just released into the Public Domain. For Aminet go to gfx/conv/gif_io.lha, for CompuServe GO AMIGAUSER, Library 8, GIF_IO.LHA

Cloanto have also been busy on new DataTypes to be included in the Surfer Pack. The DataTypes which are for the GIF, Jpeg, PNG and XBM formats, support 24-bit DataType tag extensions, and can pass true colour data to applications like the CyberGraphx software. They can also process around 99.5 per cent of pictures on the Web –a higher percentage than comparable Mac and PC systems.

A new CD-ROM is on the horizon too. Called The Kara Collection, it is a compilation of ten years of artwork from Kara Computer Graphics and is the first time some of this material will be available to the public. Ideal for pictures, animations, presentations and titling effects, the collection will house 80 ColorFonts and AnimFonts which can be used to create animations with any Amiga package that supports Anim-Brushes. It will also contain Starfields animations with moving stars from different perspectives and Plaquegrounds with textures such as marble and wood.

For more information e-mail Cloanto at <info@cloanto.it>

Softwood creates new windows

USA news

by **Jason Compton**

Softwood, well-known developers of the 'Final' series of Amiga productivity software including Final Writer, Final Data, and Final Calc, recently announced plans and specifications for Final Writer for Windows 95 computers. The first release is to be free, with a $25 registration fee in order to obtain the spell checker, thesaurus, hyphenation, and extra features. The software will be available for download from Softwood's Web site, http://www.softwood.com.

Now that Softwood has a Web site, they're putting it to good use. In addition to offering personal Web sites for a fee, Softwood has opened an Amiga Mall at http://www.amigamall.com. Here, commercial and shareware Amiga developers can offer their products from a central Web location.

Softwood can be contacted as info@softwood.com or on (001) 602-431-0949.

IBrowse by HiSoft

While no confirmation was available at press time, reliable sources within Omnipresence Development, the team behind the IBrowse World Wide Web Browser, indicate that their product will be published by HiSoft of the UK.

HiSoft is perhaps best known for their Squirrel SCSI interface for the A600 and A1200 and their Twist database software. They have already made moves to get into network software already, with the announcement of their imminent Surf Squirrel, the PCMCIA interface with both SCSI and a high-speed serial port for better net access.

In addition, their North American development and distribution partner, Oregon Research, is expecting to launch their own network interface suite to go head-to-head with AmiTCP and I-Net.

Called Termite TCP after their popular terminal program, it is planned to be exhibited at the World of Amiga show this April.



Perhaps we will be seeing iBrowse appearing on the HiSoft homepage in the near future

Contact Point

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Editor-in-Chief, Amiga Report Magazine
(708) 741-0689 FAX
AR on Aminet – docs/mags/ar???.lha
AR Mailing list – Mail me
WWW - http://www.omnipresence.com/Amiga/News/AR, www.cucug.org/ar/ar.html

New Prices

Warming up for the National Association of Broadcasters (NAB) video-related conference, Draco Systems have announced a pricing schedule for the Draco non-linear editing computer from Macrosystem GmbH.

The base Draco, an 060-based Amiga compatible computer with the Altais high-speed graphics card using the CyberGraphX system, is US$4750. For US$6995, the unit includes the Zorro-II V-Lab Motion non-linear editing card. (Alternately, current owners of the V-Lab Motion card can transfer their card to the Draco.) On the high end, the Draco with the 32-bit Draco Direct V-Lab Motion card is US$8995. Adding a 1 Gig system hard drive and 4 Gigs of video hard drive space is an extra $2000, for a total of US$10995.

All Dracos will come complete with the AdPro Suite, consisting of AdPro 2.5 (with additional bug fixes), all available loaders and savers, MorphPlus, the Scanner pack, the Pro Conversion Pack, and additional CyberGraphX and Retina support.

Draco Systems will be attempting to pierce the hotly contested non-linear editing market, currently courted by such Amiga and former Amiga companies as NewTek, PLAY, and CEI.



Wonder resolution in sight

After an unsuccessful attempt to buy back the assets of the company, CEO Mark Habinski will face off against any interested bidders as the assets of Wonder Computers of Canada are auctioned off on 21 March 1996.

Before entering bankruptcy in late January, Wonder consisted of a six store retail chain, the Lazarus Engineering division, and the Information Technology division. Despite the success of their World of Amiga show in December and growing sales due to the availability of Amiga computers in North America, Wonder's loan was recalled by its primary creditor and was unable to continue as a going concern.



The coverdisks

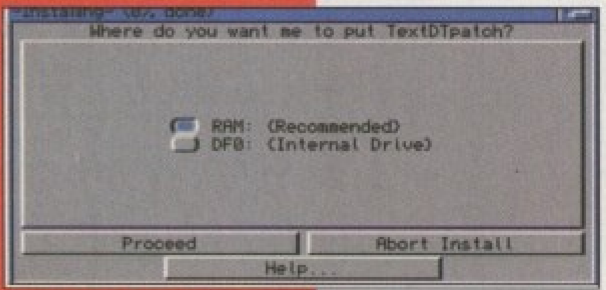
We let you get your hands on the latest version of MUI, the extendible, enhanceable, configurable GUI

Extracting coverdisk files

Before you even think of putting the coverdisks any where near your computer you should make sure you write protect them by moving the black tab in the top corner of the disk so you can see through the hole. Doing this makes sure you cannot damage your disks in any way. There is also no reason why the coverdisks need to be written to, so even if the computer asks you to write enable the disks, don't do it.

To extract the programs off the second disk you must make sure you have booted your computer with the first coverdisk, otherwise your Amiga will not be able to find the c:Installer program, and frustration will soon set in.

To extract any single archive, simply double-click its icon, and follow the on screen instructions. If you want to quickly extract the program to RAM, select the NOVICE level on the welcome screen, and press proceed once on the current screen, and then again on the next. The program can then be found in your RAM disk. Normally, most programs need further installing, so read the documents on how to do this.



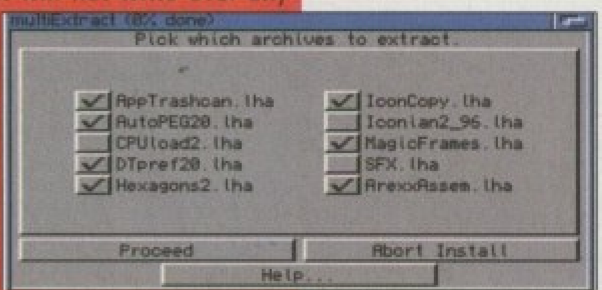
Readers lacking a hard drive will have to stick with extracting single programs

You also have the option of using a floppy disk. If you pick this option make sure you have a blank formatted disk at hand, and if you only have one drive get ready for lots of disk swapping and a long wait. People with machines that only have 1Mb may have trouble extracting large files to RAM, so in this case you will need to use a floppy.

Hard drive users

Hard drive users do not have to boot with the first disk, but you must make sure you have Commodore's *Installer* program in your C drawer. To make sure your hard drive has the correct files in place, double-click on the **SetupHD** icon. This will check if you have the Installer program and if not will copy it across – do not worry as it will not write over any existing files.

All you hard drive owners will find MultiExtract very useful. It is a separate method of extracting the coverdisk files, and allows you to extract a number of files in one go to your hard disk or RAM.



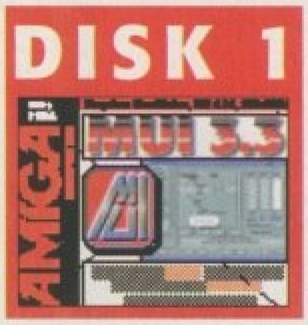
This is MultiExtract for all you lucky people with hard drive or lots of RAM

When you run MultiExtract you will be presented with a number of check boxes, each representing one of the programs on that coverdisk. All you have to do is de-select all the programs you do not want extracting, and then press proceed. All the selected programs can now miraculously be found in the selected destination.

Magic User Interface v3.3

Author: Stefan Stunz

Workbench 2.04, hard drive

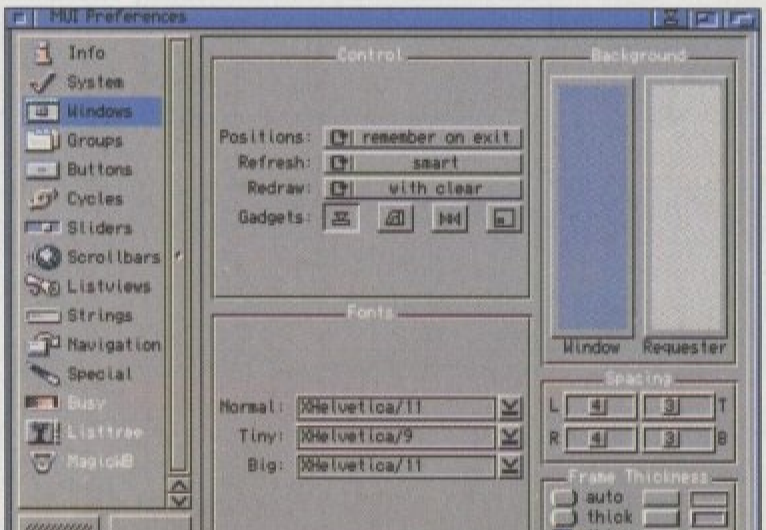


Some people love it, some people hate it, but whichever type of person you may be you cannot deny that MUI programs look very attractive and are very easy to use.

This version of the coverdisk is an unregistered version of MUI 3.3 and has had many speed improvements added to it. Most importantly, the routines that create MUI objects, these being any part of the interface buttons and so on, have been re-written in assembler which means the creation and redrawing of the GUI is much faster than before. These speed improvements really shine through on slower machines because they benefit the most from the increased speed. There are also a number of important bug fixes introduced in the last few versions.

Once you have extracted MUI from the coverdisk into RAM you need to install it onto you hard drive. If you do not already have a copy of MUI this version will only require around 1.5Mb of space, but can be reduced to about 800k if you do not install any of the documentation, extra images or demo programs that are worth a look but are not necessary.

Installation is very simple thanks to the well written Amiga installer script. You should really choose the Intermediate install level as this will allow you to choose exactly where the MUI drawer and all the MUI files should be created. Once installed you should reboot your machine to make sure MUI is set up correctly. You will now be able to run any MUI program.



Unregistered users will have to put up with plain old looking programs

SHAREWARE

Many of the programs on the second cover disk are what are commonly known as Shareware. Such well written programs take many hours to write and a lot of hard work and dedication on the part of the programmer.

When a program is called shareware it means the programmer has generously allowed you to try out their program, a lot of the time with no restrictions, and if you then decide you like it you are obliged to send the author the shareware fee.

Normally this is no more than ten pounds and in return the author will usually keep you supplied with the latest version of that program, along with their undying gratitude of course.

So please don't forget to send your fee.



If you register you can change each MUI program to look however you want

MUI is currently invaluable for people wanting to get on the Internet

REGISTER MUI NOW

The version of MUI on the coverdisk is unregistered which still allows you to run all MUI programs which have many advantages over your normal Gadtool interfaces, but you will be stuck with the standard Gadtools look.

The full version of Magic User Interface allows you to tailor almost every pixel of each MUI program to your own taste, and future registration fees will normally be at a reduced amount. The prices are as follows:

Registering for the full version of MUI will cost you £15/$20
Upgrading from a previous version of MUI will cost £8/$10
Readers using the *Amiga Computing* MUI 2.2 coverdisk will, unfortunately, have to pay the full registration fee because it was a special one off version.

Please rush me my registered version of MUI 3.3
Please Deliver To:
Name (Miss/Ms/Mrs/Mr)

Address ....

....

....

.... Post Code ....

Country ....

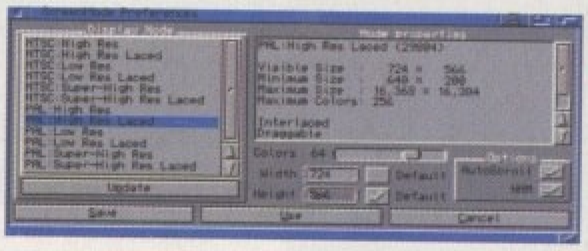
Daytime Phone ....

☐ I enclose cheque/cash for________

Please allow (28 days) for delivery
Please send your order form to:
Paul Jewell, 7 Fairfield Av., Cardiff CF5 1BR

US/Canadian readers, please send your order form to: Robert Blayzor, PO Box 807, Johnstown, NY 12095-0807 USA

All the following programs require you to have MUI installed, so it's lucky we put them on this month's coverdisk



MUI screen mode preferences, better than the real thing

SCOUT

Author: Andreas Gelhausen
Magic User Interface
Workbench 2.04

Scout is a system monitor which allows you to find out many things about the state of your computer such as libraries, windows, resident commands, tasks, interrupts, ports, memory and loads of other things. It is also possible to perform a number of operations on certain parts of your system, close windows, and freeze tasks.

MUI is not actually needed as all of Scouts functions can be accessed through the shell, but this is obviously not as simple. You can even use Scout as an AmiTCP service which allows you to access other people's machines over a network.

MUI SCREEN MODE 1.5

Author: Cyril Deble
Magic User Interface
Workbench 2.04

The nicest thing you can say about the original Commodore Screen Mode requester is that it worked. This MUI version gives you the obligatory tailored MUI interface that is font sensitive and resizable, and it also has the unusual option of letting you have a Ham screen mode. This potentially allows you to have around a quarter of a million colours on your Workbench.

MAD HOUSE

Author: Carsten Jahn
Magic User Interface
Workbench 2.04

Blankers on Macs and PCs have started to turn heads, and this all kicked off from the old flying toaster blanker that appeared on the Mac by the After Dark people years ago. Unfortunately, this has ended up with certain PC blankers requiring 20Mbs of hard drive space as they actually end up telling a complete story.

If you do not have that amount of space to spare then Madhouse could be just what you are looking for. It is a MUI screen blanker, similar to Blitz Blank, and is very easy to use and set up. You should use the provided installer icon to install Madhouse, otherwise you will need to set an assign by hand so it can find its blanker modules.

As standard, Madhouse comes with 12 blankers but it can accept SwazBlanker modules, so if you have this already you can extend your number of blanker programs. Of interest there is a Sensible Soccer look-a-like blanker that plays out a full football match, or soccer match to our overseas friends.

There are plenty of options that separate MadHouse from other blankers and it comes with a good number of quality blankers – the snow, soccer and nautical are particularly novel. This is a shareware program so if you plan to keep it do not forget to register as this will insure that it will be continued to be developed in the future.

Lottery

Author: John Cassar
Workbench 2.04

Lottery madness seems to have the entire nation firmly in its sweaty mitts, with people shamelessly throwing pounds out of the window just to have the words "it's not you" reverberating firmly round their heads.

It has also seemingly kick started every two bit programmer into writing their own lottery predictor. The last few months have seen a number of programs popping up in the *Amiga Computing* offices, one or two of which were very good, many of the others being dubious looking random number generators.

This lottery predictor is different. Firstly it's not written in Amos so it multitasks correctly and uses standard looking gadgets. Before you run Lottery it really needs to be installed using the provided installer script which will set up the Analyser assign, otherwise you will have to do this manually from the Shell.

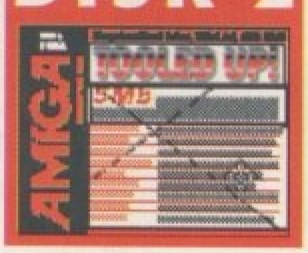


Everyone's a winner baby, well maybe not but Lottery could change your fortunes

Once you have Lottery up and running there are plenty of statistics about previously drawn balls. You can find out the number of times each number has appeared, the frequency certain numbers have been drawn, and if low, middle or high combinations are more common than others.

When it comes to actually predicting the numbers, Lottery uses a fairly straightforward system. This consists of producing three lines of numbers, one biased to high numbers, one biased to low numbers, and the last to produce a combination of the two. You can have up to seven lines, or a syndicate mode allows you to have 100 rows, and when the balls are actually drawn you enter these into the Lottery database which will automatically check if you have won or not. The program is win-ware, so if you get four winning balls or more using it you should send the author some of the winnings to show your gratitude.

DISK 2



AmiCDFS 2.4

Author: Martin Berndt
Workbench 2.04

Current owners of SCSI interfaces who have a CD drive will probably be using the old AmiCD file handler or, if you have Workbench 3.1, you will be using the Commodore CD file system. These do a perfectly good job, but there is always room for improvement.

This is an update to the original AmiCD file system that many people will have. This version is now faster and improves compatibility with strange DOS packets. Proper disk buffers are now available which helps CD access and loading of large files. Generally, the original code has been cleaned up and optimised to get the best out of your CD-ROM.

The supplied AmigaGuide does explain how to install the software. You need to copy the CD0 icon to your DEVS:DOSdrivers directory, copy the AmiCDFS and WBStartHandler files to your L directory, and finally copy over the Mount and Setpatch commands to your own C drawer.

You will need to change the CD0 file with a text editor to suit your own machine's setup. Load the CD0 file into your favourite text editor and change the DEVICE to your SCSI device – for Squirrel users this will be *squirrelscsi.device*, and owners of other SCSI cards will need to consult the documentation to find out the correct device of their SCSI card.

After this, adjust the UNIT number to your CD's SCSI unit number – most CD players allow you to select the SCSI ID number on the back. Now restart your machine and you should have access to your CD.



You even get a pretty good AudioCD player with AmiCDFS

Startup Control

Author: Dirk Jesse
Workbench 2.04

Startup Control is a program that gives you more control over how your machine starts up. On my machine I have a small program that detects if I am holding the right mouse button, and if so will load Workbench with the WBStartup drawer disabled.

With Startup Control you will have this option, along with many more, implemented in a much better way. To install Startup Control, copy the program to your C directory and insert the line **C:StartupControl** in your startup sequence, just after the C:Setpatch command. To do this, open a shell and type *ed s:startup-sequence*.

When you reboot your machine, if you hold down the left mouse button and one of the Alt keys, you will have the choice to disable the WBStartup, User-Startup, run script files, open a shell window, and even force a normal PAL window – if you have a monitor driver installed.

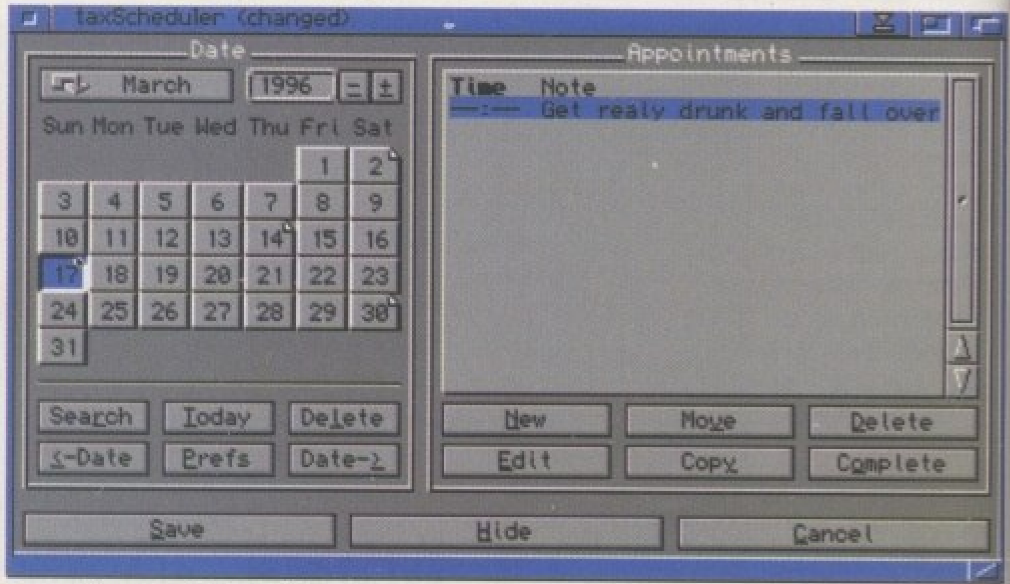
Startup Control works by renaming the files, so when you reboot your machine they are renamed to what they should be. Also, anyone using SysiHack must make sure this is run before Startup Control is.

Scheduler

Author: Oliver Kasper
Magic User Interface, Workbench 2.04
Workbench 2.04

Keeping track of important appointments, or just general things that you must not forget? What you need is a program so you can enter all these things and let it live in the background, where it can jump up and remind you that you are about to be late. Enter Scheduler, a shareware reminder program.

Scheduler is very straightforward to use. You can click on a date in the calendar and add new appointments which can be made daily, weekly, monthly or even yearly, and you can ask for a reminder at a specific time of the day. You can then iconify the program and it will happily sit back and wait for your next appointment.



Never miss one of those all important mettings again

Disksqueeze

Author: Dirk Vael
Workbench 2.04, Lzx required

For anyone looking for a better disk packer than DMS, this is your answer. Disksqueeze is an Lzx-based disk packer that is similar to DMS but much more efficient. To use it you must already have the Lzx packer which allows Disksqueeze to use its very efficient packing algorithms.

Once you have installed the program its interface is just a simple set of requesters that guide you through the packing or unpacking process. It supports high density disks, including Mac and PC formats – a unique feature for a disk packer – as well as being able to handle DMS archives, so most people should find this perfect for squishing their disks.

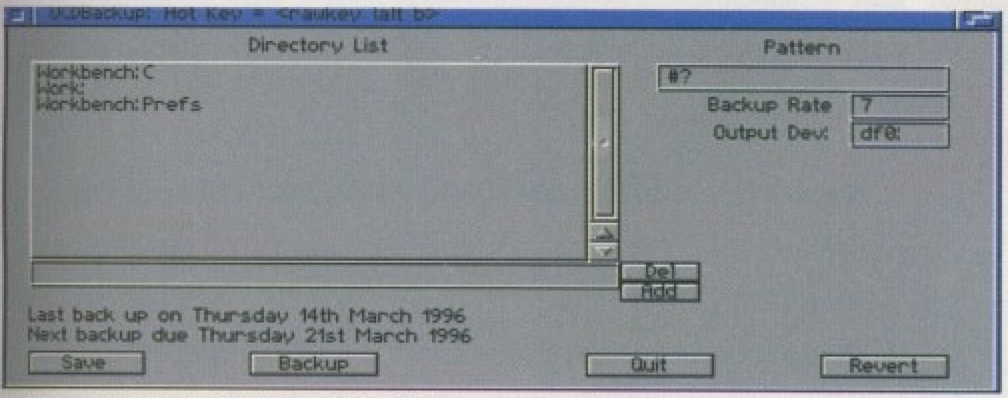
The coverdisks

UCBackup

Author: Jamie Kennea
Workbench 2.04

All the lazy people stand up. If you own a hard drive I bet you haven't bothered to back it up in years, even though you know if it crashes you will never be able to get your files back. Well, UCBackup will be a little life saver for you.

Firstly, there is the absolute minimum of fuss involved. You drop it into you WBStartup drawer, double-click on it, then use exchange to pop up its interface and select what directories you want it to check. From then on, every week, UCBackup will scan these directories and Lha all the new files onto a destination of your choice.



Protect you data, back it up regularly. With UCBackup you don't even have to remember

Dialer

Author: Iain Hibbeft
Workbench 2.04

This is a tiny little device that was discovered when doing our Internet virgin article, and works with SLIP or any other software that accesses the serial port.

Dialer provides an automatic dial and logon script for all types of network software that uses the serial device but does not know about modems.

You will need to copy the dialer.device to your DEVS drawer and the dialer0.config needs to be edited to your own needs and copied to the Envarc drawer. Checker out the Internet virgin feature on page 53 for more details on how to use it.

CBE

Author: Anthony Moringello
Workbench 2.04

You may or may not know that the Amiga actually has up to 256 separate clipboards. The clipboard is where any temporary data is stored, and usually when you cut or copy something it is stored to the first clipboard. This allows you to copy from Brilliance and paste the graphic into Final Writer.

Instead of letting all these clipboards go to waste, CBE gives you a clipboard history by buffering all the past cuts and copy into a list. From this you can choose which one to paste with and if they should be cleared or not.

With Workbench 3, users can view what the contents of each clip board is, therefore giving you a better idea of what you will be discarding or pasting next.



Clipboard Enhancer lets you visually keep track of all your current cuts and copies

Update libs

Author: Dan Rhodes
Workbench 2.04

You know the situation. You have a new program with loads of libraries, most of which you already have, but how do you easily tell if the these libraries are newer or older than the ones you already have. Update libs is the remedy for you ills.

It is a Shell-based program so copy it into your C directory, and to run it just supply it with the directory containing the mystery libraries and away it will go.

For each library it will ask you whether it should install it or not.

FX

Author: Narkus Albrecht
Workbench 3.0

FX is a small program that allows you to add sound effects to accompany a number of standard system events. Usually, these sort of programs just watch for disks being inserted or removed.

FX can watch all manner of operating system calls, from windows and screens being opened and closed to files being deleted and renamed.

The program requires Workbench 3 as it uses Datatypes to load the samples, but this means you will be able to use PC Wave samples or any other sample Datatypes you have. An install script is provided so installation is simple, and as long as you have a selection of samples, you can get going straight away.

Disclaimer

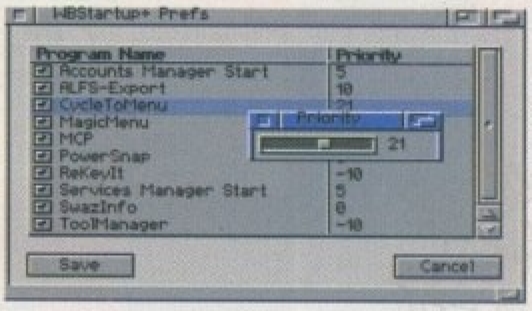
Amiga Computing cannot be held responsible for any damage caused directly or indirectly by the use of these programs

WBStartup+

Author: John Hughes
Workbench 2.04

This is another one of those little make your Amiga a nicer place to live-type of programs. WBStartup+ gives you a handy preference program to handle how and which programs are run from the WBStartup drawer. It does this by creating two new drawers in the WBStartup and adding a new program to handle launching all your chosen programs. This is all set up by the usual installer script and is very straightforward.

When Workbench first appears, if you hold down Ctrl you can modify the preferences before anything is run, left alt interactively asks you if it should run a program or not, and the left shift will disable all the programs. You might be interested to know that this is the first program I have seen to use a new library called launcher. library which is written by Amiga Technologies no less. They must be up to something after all.



Yet another program to put in your Prefs drawer, but at least its a handy one



If you want you can get a System 7.5-style loading bar. You can even choose the background pattern

CRSnap

Author: C Hahn
Workbench 2.04

This is a tiny screen grabbing commodity that will correctly handle all AGA screen modes. Double-click the icon and press both Amiga keys and F10 to grab the current screen. You can then adjust the destination directory and the grab hot key from the icon's tool types.

Faulty disks

If you should find your Amiga Computing CoverDisk damaged or faulty, please return it to:

TIB Plc, TIB House, 11 Edward Street, Bradford, W. Yorks BD4 7BH.

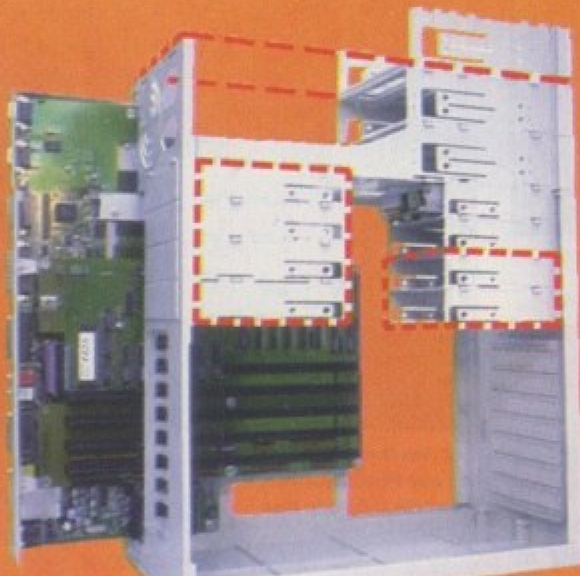
Please allow 28 days for delivery

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  only limited by your controllers' capabilities
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  through SNAP and CLICK system
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And now for some technical specifications

the left pictures give you an imagination of the internal con-struction of the infinitiv™ tower system. The red marks and lines show some extended drive frames in both the front- and the back area of the tower. Further, you can see an Top Case™, mounted on the towers' top, which explains the expandability of our solution. Each Top-Case™ expands your infinitiv™ tower for an 5,25"/ 3,5" drive bay, ready to use and easy to assemble. Additional drives such as CD-ROMs, harddisks, streamer tapedrives etc. will snap in easiely by using our sophisticated „click and snap" system.

micronik® accessoires

RAM card, expandable up to 8MB,
incl. clock and math co-pro socket with standard PS/2 SIMM modules.......... £ 42

RAM card with 4 MB RAM,
incl. clock and math co-pro socket.......... £ 109

PC-keyboard interface for the AMIGA™ 1200,
Installation through solderfree flexcable.......... £ 42

AMIGA™ 1200 Interface/keyboard extension,
installation through solderfree flexcable, both inter-faces are connected through an 5-pole plug.......... £ 55

3-way ROM-switch for the AMIGA™ 1200,
suitable for ROM V 1.3, 2.0x & 3.0 or 3.1 (pair).......... £ 20

AMIGA™ 1200 battery backed up realtime- clock,
(prevents your A1200 from beeing loosing its' mind after restart !).......... £ 8

Double IDE-bus harddrive adapter ,
for using 2,5" und 3,5" harddisk drives at the AMIGA™1200, incl. powercable.......... £ 10

Keyboard case for AMIGA™ 1200,
for the original keyboard, solderfree assembly.......... £ 29

Keyboard case for AMIGA™ 1200,
incl. Interface, spiral cable and flexcable for external connection of the original internal keyboard.......... £ 75

AMIGA™ 1200 internal keyboard,
original keyboard for the A1200.......... £ 20

VGA-adapter for AMIGA™ 1200/4000,
from 23 pole on 15 pole multi sync/VGA.......... £ 8

POWERSTATION external powersupply,
for the AMIGA™ 1200 (i.e. A500, A600, through standard plug), 23 amperes, featuring on/off-switch and additional con-nectors for 1 x 3,5"and 3 x 5,25" devices !.......... £ 55

A 1200 internal original disk drive,
suitable for the A1200, 880 kb, incl. mounting material.......... £ 29

External disk drive,
suitable for all AMIGAs™ (maximum 4 drives), featuring on/off switch and connector for aditional drives on the back, 880kb.......... £ 38

micronik® infinitiv - tower

infinitiv™ A 1200 tower,.......... £ 16

infinitiv™ PC-tower,.......... £ 16

infinitiv™ A 1200 Z tower case,
incl. ZORRO -II™ bus board, **PC Keyboard**.......... £ 29

A1200 infinitiv™ tower, (AMIGA-keyb.&Interface).......... £ 19

A1200 Z MAGIC infinitiv™ tower,
featuring 5 ZORRO™-II slots and 3 PC-ISA slots, 170 MB hdd, magic software-package.......... £ 68

BUS 1200 Z1, AMIGA™ 1200 bus board,
featuring 5 ZORRO™-II slots and 3 PC-ISA slots.......... £ 16

BUS 1200 Z2, AMIGA™ 1200 bus board,
featuring 5 ZORRO™-II slots, 3 PC-ISA and an optional video-slot, additional this version contains even an PS/2 - SIMM-socket.......... £ 19

A4000 infinitiv™ tower,
featuring 7 ZORRO™-II slots, 3 PC-ISA and an video slot.......... £ 27

BUS 4000 Z, AMIGA™ 4000 bus board,
featuring 7 ZORRO™-II / -III slots, 6 PC-ISA and 2 video-slots.......... £ 16

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Wordworth revolution



Why restrict yourself to plain old letters? If you make full use of Wordworth anything is possible

After an in-depth preview. Neil Mohr gets a chance to look at the finished article

Five revisions on and Wordworth has come a long way and grown up a lot. The last few versions have taken full advantage of the increased number of users with higher specification machines who expect programs to take full advantage of increased storage space and processor power. This has now led to full 24-bit picture support, free form text boxes and tables, scalable fonts support for Compugraphic, Post Script and True type fonts, and, of course, Digita's Font and text effects.

The extended font effects give you much more flexibility over how fonts will appear. You have complete control over the width, oblique, superscript and subscript levels for all the fonts, along with being able to make them small caps and add strike through and double underline.

The only feature that was not fully implemented in the beta I looked at was the Wizards ARexx function. Wizards are ARexx scripts that have been written to help automate standard processes that you may use Wordworth for, or as tutorials that guide you through complex processes.

Currently, you get five scripts, one of which is a mail merge tutorial, while the others help you quickly create faxes, memos, and invoices, and even a basic Web page creator is supplied.

Wizards allow you to quickly create documents by entering details into text requesters. Once everything has been entered the Wizard will automatically create the document ready to be printed. If you have some programming knowledge you could alter the existing Wizards as they are just ARexx scripts. Therefore, you could create completely new Wizards or alter the look of the documents the current Wizards create.

A cheque printing Wizard has already appeared on Aminet, so I would guess there will be more in the future.

I was surprised that Wordworth does not support the Amiga's Datatypes – as Datastore does I was expecting Wordworth to as well. This is not such a disadvantage as there are a good number of supported formats. With the usual IFF support, including Ham and 24-bit images, Wordworth can import GIF, PCX, Tiff and Img format images, and all the major scalable image formats are covered – CGM, EPS and GEM – with EPS being the most important format of the three.

IMPORTING

As Datatypes currently only work in 8-bits there is a reason for using your own import filters, but support of Datatypes on top would allow you to import other formats not supported by Digita's own import filters, such as Jpeg – as all my pictures are Jpegs this would be a helpful addition.

Some people may feel that the recommended specification is a little high, but an A1200 with a RAM expansion or accelerator can easily handle complex documents, and if you want the sort of power that Wordworth provides then you need the hardware to match. For people with a more restricted set-up, a 'lite' version of Wordworth 5 will be released.

Having used this version of Wordworth for a while I think it is a worthwhile investment for owners of earlier versions. The style sheets help greatly in document formatting, and the extended graphics support improves the end quality of your documents. There are still differences between Wordworth and Final Writer, primarily the lack of sections and the ability to rotate graphics – both of which I think would be helpful additions to Wordworth. The only other difference is the grammar checker recently added to Final Writer 4.

Version five of Wordworth is truly excellent. All the speed problems of the earlier versions have been addressed and the program itself conforms very well to the Amiga-style guides. In fact, Wordworth has so many features, and apart from a few minor improvements, I have a hard time seeing where Digita can take it next. AC

Jargon box

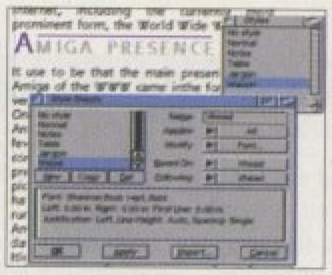
Ham – Hold and Modify, an Amiga specific display mode that allows many colours to be displayed on an otherwise limited palette screen. Ham6 4096 colours, Ham8 262,000 colours

Postscript – a page description language created by Adobe. It allows page layouts to be described mathematically so pages can be reproduced perfectly at any resolution

EPS – Encapsulated Postscript, normally Postscript is sent direct to printers. EPS is simply the file version

ARexx – a system-wide scripting language that talks to programs that support it, and therefore allows users to control one program from within another

24-bit – When referring to graphics means that the colour data of the picture takes up 24-bits for every pixel. This 24-bits is split into 8-bits of red, green and blue colour data



Styles make formatting documents a whole lot quicker than doing everything by hand

AMIGA BLUE CHIP AWARD

Bottom line

REQUIREMENTS

RED essential — BLACK recommended

3 Mb RAM · 2.04 Workbench · 2 floppy drives

7Mb Hard Drive · 020/030 · 6 Mb RAM

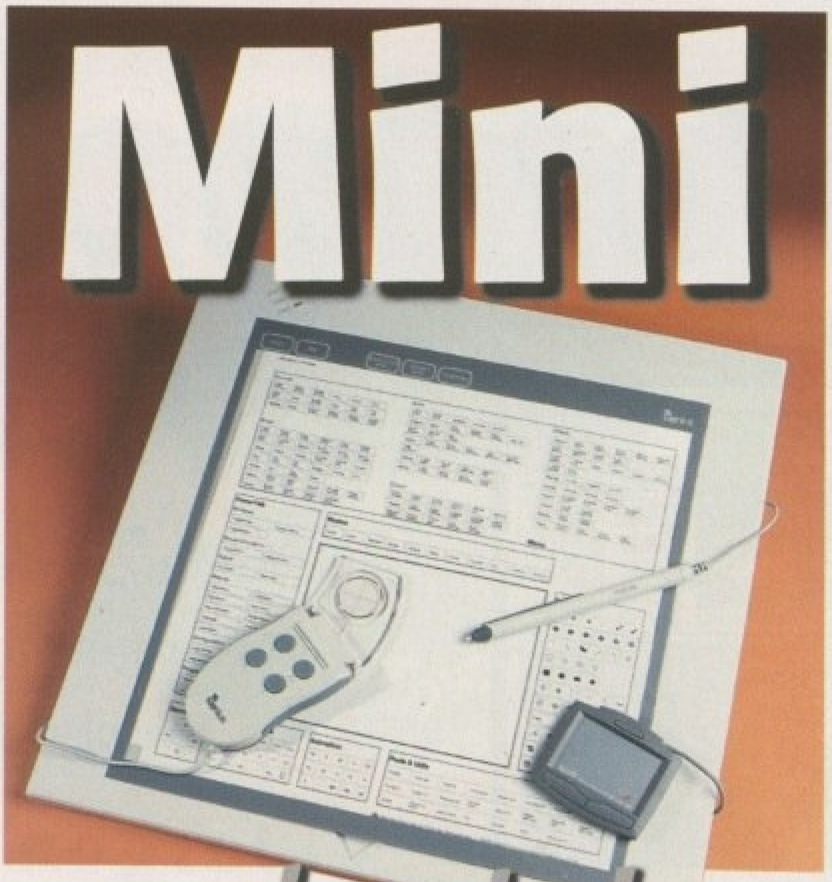
PRODUCT DETAILS

Product	Wordworth 5
Supplier	Digita International
Price	£69.99; Upgrade from Ww3.1 £29.99; Upgrade from any other £39.99 – Offer prices valid until end of April
Tel	01395 270273 Fax: 01395 268 893 E-Mail: sales@digita.demon.co.uk

SCORES

Ease of use	88%
Implementation	89%
Value For Money	94%
Overall	93%

Mini and mighty



Take two tablets into the showers? Not Ben Vost, he would rather plug them into his Amiga

So what do we have here? Two graphics tablets, one big, the other minuscule (and not really a graphics tablet at all). Let's start small and work our way up.

Our mini tablet is a device that has seen service on many a modern laptop and is called the Alps GlidePoint (made by the electronics arm of famous car stereo manufacturer Alpine. Perhaps you can get a sticker to go across the top of your monitor that shows you have GlidePoint too!). The idea is that it replaces a mouse or trackball setup and allows you to use your computer just by moving your finger around. The GlidePoint's operating area is only about an inch by two, but the manufacturers reckon they have a resolution of some 4900 dots crammed into that tiny space.

This little beastie plugs into your valuable serial port to work, so owners of multi-serial cards can sigh with satisfaction that they can at last use one of those extra serial ports, while owners of A1200s will have to tear their hair out when they want to use a modem, or the other tablet in this review.

Driving

There is accompanying driver software included on disk which can sit in your WBStartup drawer, ready to run when you boot. In my experience, using serial mice on an Amiga can cause frustrations when you need to boot from a disk other than your normal one. I, certainly, always left my normal mouse plugged in, just in case. This, of course, limits the usefulness of these devices and along with the serial port use, must limit the appeal of the product for most people.

However, all this would be fine if the product was great to use, but unfortunately it isn't. I found the GlidePoint to be awkward in use, especially for moving windows around. You couldn't use it for drawing any more than you could use one of those lightpens that were popular about four years ago. In short, the GlidePoint is really only suitable for those well-heeled Amiga owners who have an extra serial port or two going unused, and so little desk space that they have to use it. Anyone else would be recommended to look at getting a trackball or three-button mouse.

Our second tablet, on the other hand, is a much better affair. You still need to take up that valuable serial port, but at least with this product you'll probably only be using it occasionally.

Tablets of this kind have been available before, but this is the first I am aware of that actually comes with template editing software to allow you to set up areas of the tablet as buttons, rather than having to use the menus or keyboard shortcuts. The tablet also comes equipped with both stylus and four-button puck, which is unusual, and Power have supplied ready-made templates for some of the most popular graphics packages on the Amiga, DPaints IV and V, and Personal Paint 6.4. The tablet itself is sturdily made and, as you can see by the photograph, the puck is ergonomically designed.

The Power tablet performs well in drawing operations, although for best use a tablet needs to be pressure sensitive and the stylus is a bit top heavy due to the trailing wire, but other than these minor qualms, I would have no hesitation recommending this tablet to a prospective buyer. AC

Jargon box

Pressure Sensitive – tablets that are pressure sensitive allow for more painterly effects, such as varying a line's width or changing the amount of paint laid down.

Serial mouse – PCs have to use their serial port to plug a mouse into, there isn't a mouse port. This has lead to a wide variety of mouse-type devices that you could plug into your Amiga's serial port if a) you are willing to give it up, and b) you can find a driver.

Template – a template is a file which you load when you run your tablet software. It tells the tablet that certain areas are to be used for mouse movement, your drawing area if you like, and others are segmented off for button or menu replacement.

Bottom line

REQUIREMENTS

RED *essential* **BLACK** *recommended*



Free serial port

PRODUCT DETAILS

Product	PowerTab
Supplier	Power Computing
Price	£195.95
Tel	01234 273000

SCORES

Ease of use	85%
Implementation	80%
Value For Money	85%
Overall	85%

PRODUCT DETAILS

Product	GlidePoint
Price	£59.95

SCORES

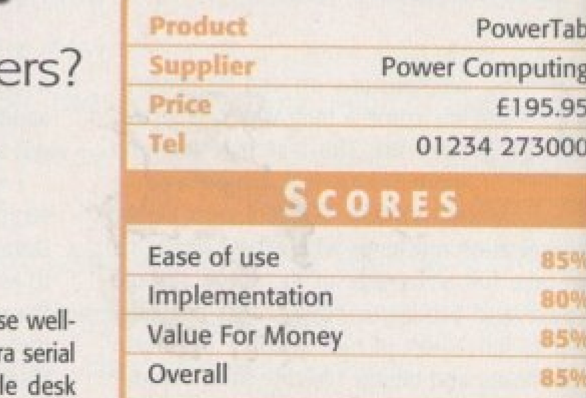
Ease of use	65%
Implementation	65%
Value For Money	45%
Overall	55%

Template for a generation

The PowerTemplate software that comes with the PowerTab is almost worth the asking price on its own. It allows the user to create templates for their favourite programs so that all functions (or at least as many as possible) are available directly from the tablet, without having to go through menus or requesters. The template software can replace keyboard, qualifier and ARexx commands with buttons on the tablet that take some getting used to, but are much faster once acclimatised.

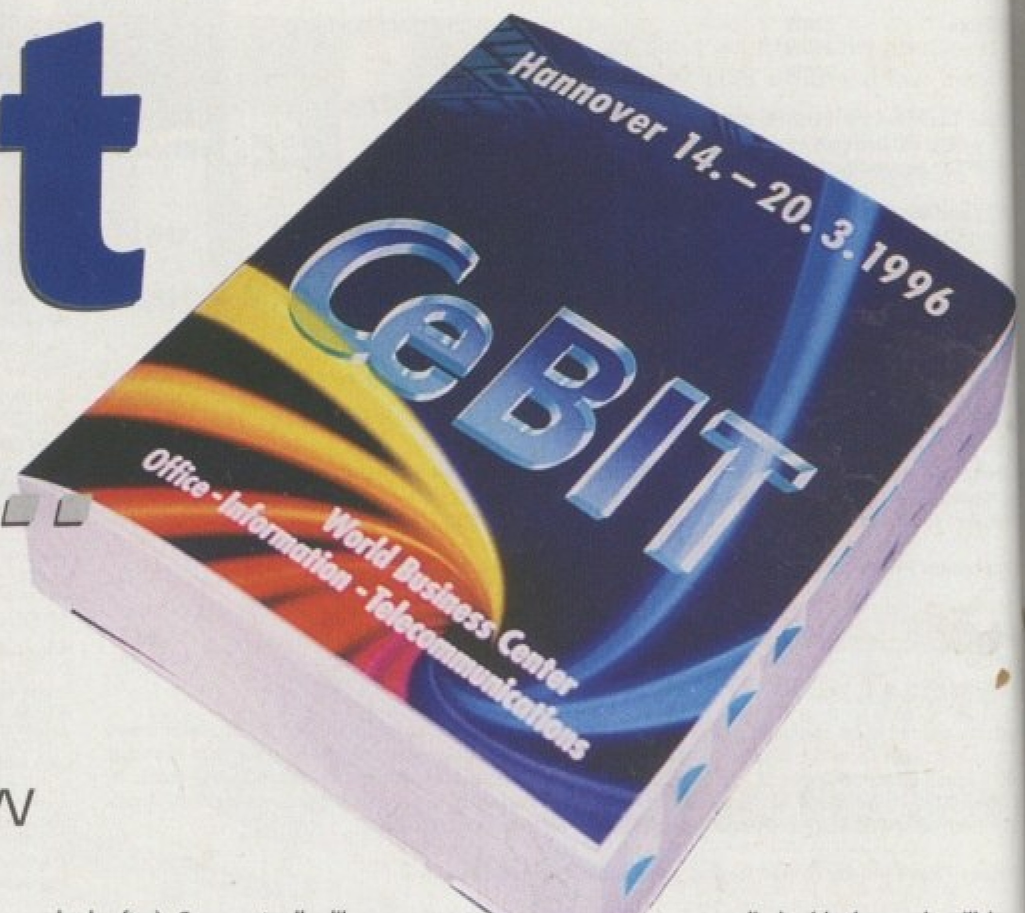
However, all is not perfect with PowerTemplate. NTSC users might have a problem displaying the whole screen, and non-AGA, non-graphics cards using Amiga owners won't be able to run the software at all. It's also slow and clunky to use, although looks very nice. The worst problem, though, is the fact that although the PowerTab software will run through any serial port, PowerTemplate will only use the internal serial port found on every Amiga.

The software is also a bit buggy and prone to crashing, so frequent saves must be made in order to avoid losing work. But all that considered, PowerTemplate is a nice piece of software which I can only hope will improve over time. I'm currently making a template for LightWave's Modeler that will save me an enormous amount of time looking through Modeler's menus, and that alone makes up for all of PowerTemplate's faults for me.



A template for Modeler, a real time saver for people who can't remember keyboard shortcuts

CeBit and die...



Our erstwhile editor reports from Europe's largest computer show

Murder. It's a tribute to the estimated 750,000 people that visited CeBit this year that they managed it at all. Already, most hotels in the city are fully booked for next year's show, and possibly the year after. Already these same hotels are taking reservations for Expo 2000 which will take place in Hannover with a predicted 40,000,000 visitors over the course of a year.

So what hope did I have, only trying to make my way here two weeks before the show? The answer is none. Unless, that is, I wanted to spend 650DM a night for a hotel room. How much is 650DM? Ooh, only about £325 at the current exchange rate. And that's per night. It does include breakfast but no baths in asses milk or slaves fanning me and peeling grapes or anything like that.

Anyway, here's a tip for last minute visitors to CeBit. When you arrive at Hannover airport, visit the Hannover Hotel Service – you should be able to find it easily enough – and queue there for about two hours. They'll find you a room, either in a private house, bed & breakfast, or a hotel conference room (which is where I stayed). The cost shouldn't be more than 100DM a night, unless you rent an apartment, in which case you should look for about 150DM a night. But you don't really want to know about this, you want to know all about the show.

Enormous

IT'S MASSIVE!! It really is. It took me at least half an hour of walking to even reach the Escom/Amiga Technologies stand, going past stands that were larger than a three-bedroomed detached house showing off PCs, printers, imagesetters, storage devices, ATM machines, and any amount of different computer-related equipment. At the front of one of the stands, I don't know which, there was an HDTV in a case filled with bubbling water, showing a fish tank. The only difference I could see between it and a real tank full of fish was that the HDTV display looked more real (and certainly a lot easier to look after). So eventually, like Amundsen to the North Pole, I reached the Escom stand. It was packed. Unlike Compaq or NEC, who'd created an air of business-like silence and space, the Escom stand was, by contrast, more like a heaving nest of termites, with about as much room to move around as on the Tokyo subway. They had the usual PCs (some Commodore badged – it's nice to see that Escom are getting something for their $10 million dollar outlay) and some A1200s. The A1200s were either showing off games, music or the new Surfer pack replete with Mindwalker Web browser, of which we have a working preview copy.

As we've explained to death already, the pack comes ready to run when you buy it, and with just a phone call to IBM's toll free number you are ready to roll. The modem supplied with the pack will be a 14.4k model, but it will be up to individual distributors in each country to decide which one will be bundled with the machine.

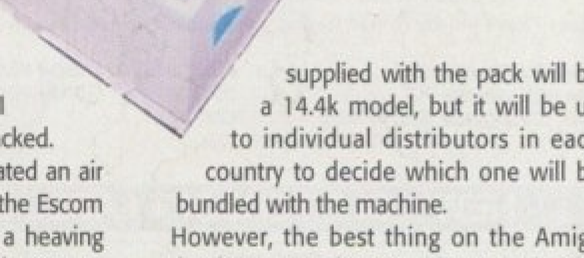
However, the best thing on the Amiga Technologies stand was, without doubt, the first new Amiga since the A4000T burst on the scene back in '93. The machine (code-named Walker at the moment) is a bizarre design as you will see from the photos on these pages, but it really looks the part and says that the Amiga is a different machine. Even with all these trendy PCs with black cases or integral speakers coming out of their sides, the Walker still stands out from the crowd.

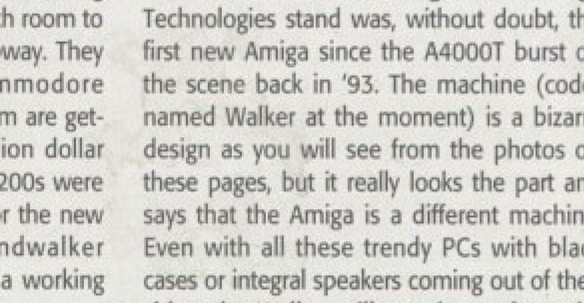
The Walker will come with a largish IDE hard drive (SCSI is apparently too expensive), 5 or 6Mb RAM (4Mb Fast, 1 or 2Mb Chip) –

Village Tronic

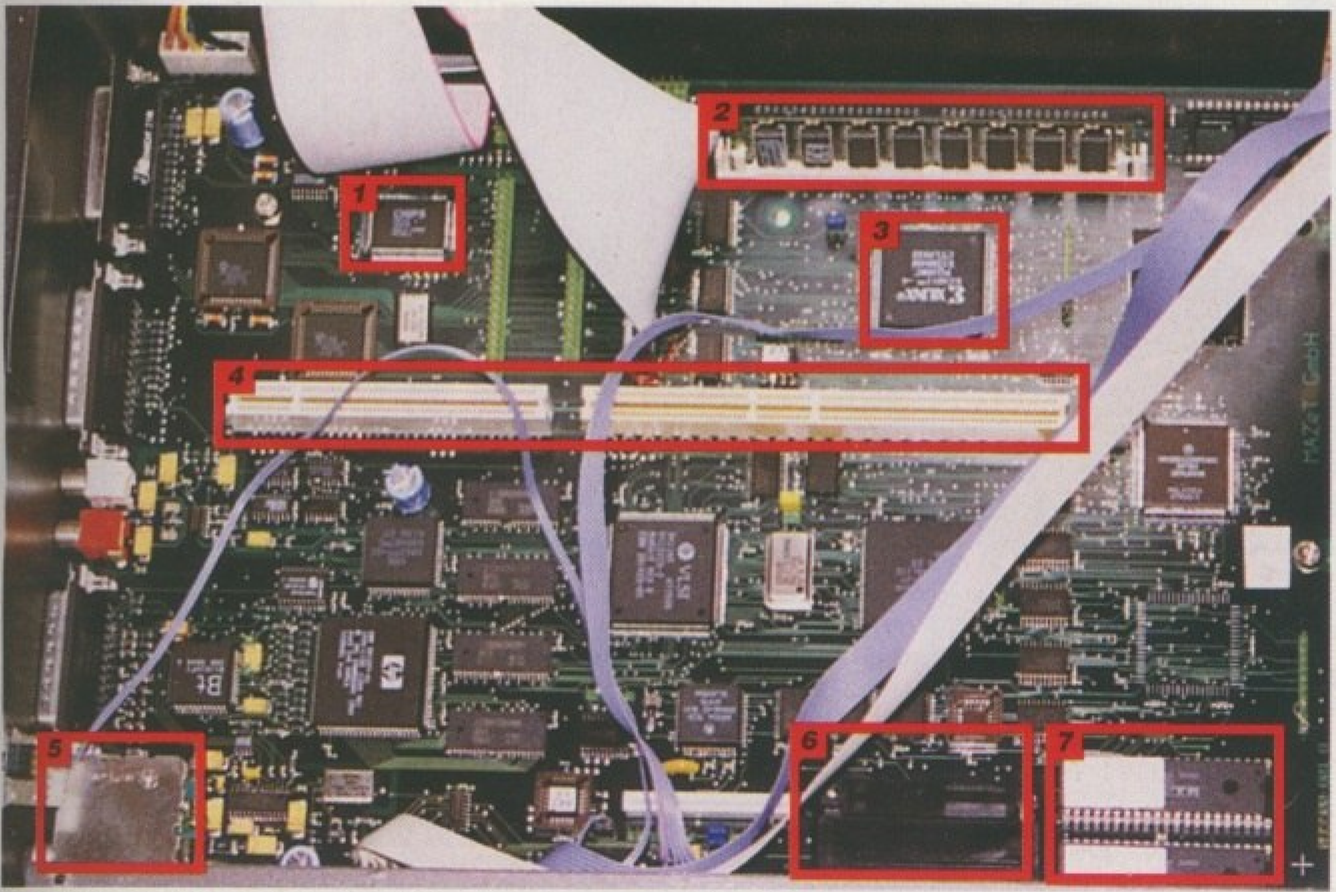
Village Tronic's large stand was jumping with interested Amiga users all eager for a look at the new Picasso II Plus or Picasso 4. If they were disappointed with their non-appearance, they soon cheered up when they saw the new version of MainActor Broadcast (the update is freely available on the Main Concept Website at http://www.ac-copy.com/maincpt.html), the DKB Wildfire 060 card for the A2000, and the new line of software from ProDAD.

The DKB board is special in several ways. Firstly, it has an ethernet port built-in, it also has a FAST SCSI II controller giving up to 7Mb/sec, a PCI expansion bus allowing for a new Picasso card to be integrated with the accelerator, and perhaps most importantly, the ability to run at a true 66MHz, something no other 060 accelerator yet does. All you A4000 owners will be happy that a board for your machines will be out by the end of the summer, and A3000 owners will be catered for by the end of the year.



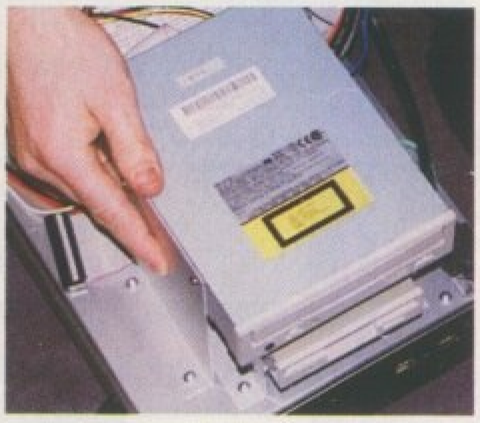


Top, the Picasso II Plus board was on display, but not in use. Below, Bob Prudden proudly shows us his 060 accelerator for the A2000



1. The first new chip in the Walker is the Super I/O chip. This can control several high-speed, bi-directional serial, parallel and MIDI ports
2. The new machine will have two SIMM sockets which will hold different-sized SIMMs up to 128Mb of FastRAM
3. Another new chip, Tony, will replace many of the functions of some of the existing custom chip set
4. The Walker's expansion slot will hold a backplane that will accept Zorro II, Zorro III and PCI cards
5. The Walker can still be plugged into a normal television through this RF modulator
6. This hard-to-see PCMCIA slot might not make it to the final version of the Walker
7. The new machine will have a 1Mb Kickstart ROM shown in a two-chip format here
Although this motherboard is still a prototype, it is already an amazingly 'clean' board. The final version might be smaller yet, allowing for more room for expansion





Some exclusive shots of the inside of Amiga Technologies new baby – The Walker

the FastRAM expandable to 128Mb via two SIMM sockets that will accept different-sized SIMMs, the Chip RAM expandable to 2Mb – and a quad-speed CD-ROM drive. It will cost between 1000 and 1600DM (£500 - £800) when it comes out for the Christmas '96 market and will be based around an EC030 chip running at 40MHz, no FPU, no MMU.

The case design is a novel one with a single multipurpose slot on the motherboard to accommodate a backplane which could have Zorro II, Zorro III or even ISA and possibly PCI slots for graphics cards, processor upgrades or whatever. Depending on what size backplane the user fits, the case will have to be extended upwards with spacers, which may result in the machine becoming a mini-tower system rather than a hoover look-alike, as has been suggested by German wits at the show.

Another change for this machine is the new SuperI/O chip which doesn't yet have a groovy name like the rest of the Amiga's chipset. This chip will be responsible for high-speed, bi-directional serial and parallel ports and has the bandwidth to provide several of them, or related types of I/O like MIDI. The Walker will come with the new Workbench 3.2 and will have a 1Mb ROM to fit some of the proposed expansions to the OS.

The design shown in the photos on these pages is only a prototype and Amiga Technologies may well change the case's colour and make the motherboard smaller. There is some question whether the Walker will ship with a floppy drive at the moment, the reasoning being that CD-ROM helps to prevent casual piracy, and even some wild rumours that you will need two floppy drives – one for old standard Amiga disks (low density ones, that is) and one for a new high density format that will use a standard PC floppy disk drive. Heinz Wroebel assures me that the machine will ship with a floppy drive and that it will be a PC high density drive, but he fears that compatibility with the old Amiga high density format will be lost.

The machine will also be able to boot from the internal CD-ROM, opening the way for games manufacturers to merge their CD32 and Walker development. Gilles Bourdin reckons it might also mean that games houses that have left the Amiga might return now that they are assured of a standard CD-based machine to work with.



Barry Thurston and Dennis Phillips looking pleased, despite the fact that there wasn't a single Amiga on their stand

Gilles doesn't feel at all worried about the future of the Amiga. He believes its strengths and dedicated userbase will see it through these admittedly lean times. He sees the Walker as an intermediate step towards the PowerAmiga next year, and hopes that one-time Amiga developers will return to the fold when they see the quality of the new machine. On Workbench 3.2, Gilles had this to say: "...some of the main changes will be networking abilities, more colourful icons (it hasn't been decided whether to use the MagicWB set or another, or design one from scratch), more utilities, etc."

REVISIONS

Workbench 3.2 will be the last revision made for 680x0 machines according to Bourdin, future revisions will only take place for the PowerAmiga. Just to cheer old-time Amiga users up, Gilles revealed that Dave Haynie and Andy Finkel are consulting for Amiga Technologies on the implementation of Workbench and design matters for the new machines, along with Olaf Barthel and Heinz Wroebel. The Walker isn't going to be a stopgap machine, however. It will be upgradeable to the PowerPC chip, when it becomes available. Speaking of PowerPCs, the PowerAmiga project is actually running slightly ahead of schedule at the moment and Amiga

MICROVITEC

Microvitec were one of the other few stands showing Amiga-based products. Their new 15" and 17" monitors were being shown and look a vast improvement on the current 1438. Both the 15 and 17" monitors will have extremely flat black matrix screens, in contrast to the goldfish bowl appearance of the 1438. Both monitors will sync down low enough for standard Amiga modes, but have the bandwidth to display 38kHz screens as well, so finally there will be an all-in-one solution for Amiga owners who want a graphics card too. The 17" monitor will apparently display screenmodes up to 1280 x 1024 in 'brilliant colour' and will display modes at frequencies up to 64kHz.

CeBit Stats



CeBit is one of the world's largest computer shows. The only one bigger is perhaps Comdex in America. A ticket for a single day costs 50DM (£25 or about $39) on the door and a ticket for all seven days is double that. The catalogue on its own costs 36DM and weighs in at about 5-6lbs. You can throw away all but a couple of ounces of that, though, if you have a suitable machine equipped with a CD-ROM because you get one with all the information contained in the book with the catalogue.

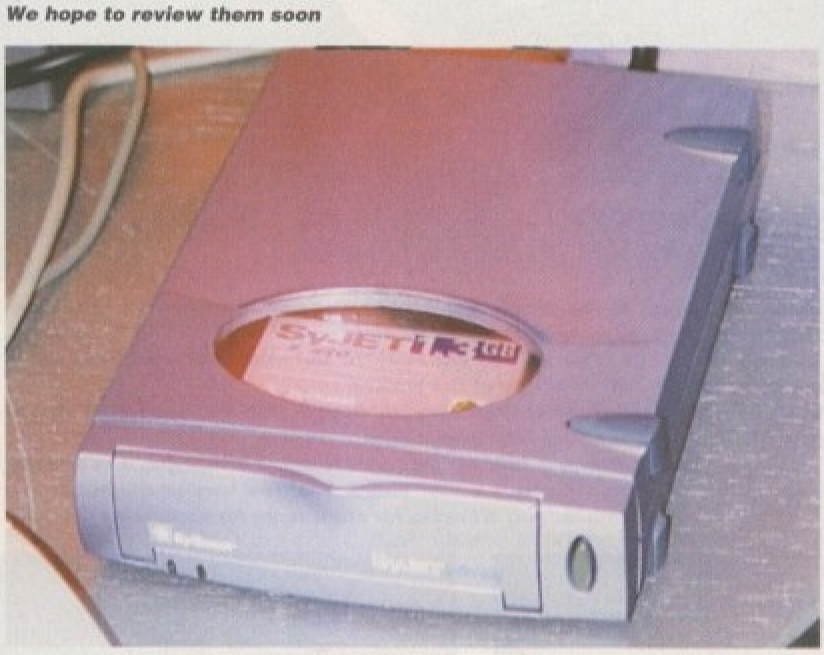
CeBit takes place over seven days in 26 halls and has a total of 6,507 companies from 66 different countries exhibiting in a total of 465,847 square metres of display space.

The showground is so large that there are bus services operating to carry people between halls and there is parking for over 50,000 cars at any one time.

There are hundreds of toilets, snack bars and restaurants all over the showground, so finding people can be a nightmare. Fortunately for me, the people I wanted to meet were all clustered around the few Amiga-related stands, so it wasn't too much of a problem.



iomega's new baby giants, the Jaz and Ditto drives. We hope to review them soon



SyQuest's SyJet should prove a major competitor for the Jaz drive

Technologies hope to have something to show this time next year. However, your loyal reporter thinks that the new machine is far from the perfect solution. When all's said and done, it is still an A1200, admittedly faster and with better expansion possibilities, but with no real improvement on current (and by current, I really mean five year old) technology.

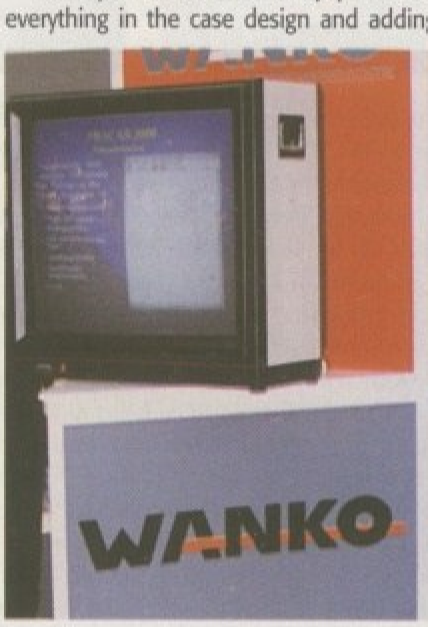
The backplane idea for adding Zorro slots is a good one in principle, but it means additional costs for the user who wants to upgrade his machine. First he has to buy the backplane, and how much will that cost? Then he has to buy his expansion. If he decides to further expand his machine, he'll have to get rid of his original backplane and buy a larger one, all the time ensuring the new card will have the slots he needs for the cards he already has, and he'll need to buy the spacer unit to make his machine tall enough to take the new cards.

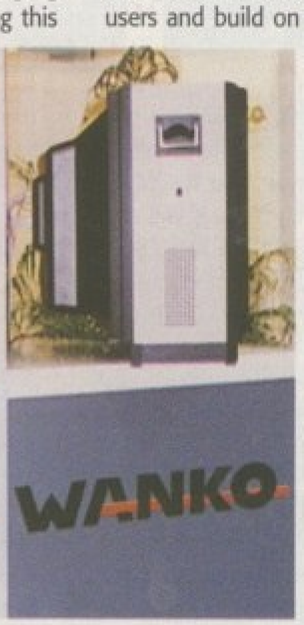
Benefits

In my humble opinion, it would have been more beneficial to have room inside the machine for two Zorro II/III cards and an in-line video slot. In addition, the machine should have had the same CPU slot as an A3000, A4000 and so on so that the companies remaining who support the Amiga don't have their resources further stretched by having to tool up for a third Amiga standard. For instance, Phase 5 already make accelerators for the A1200 and the A4000/3000. They are not going to want to have to make a third type of accelerator to satisfy Walker owners. I'm sure they'll do it anyway, but it might mean the end of them. After all, it's not as though there are thousands of existing A1200 or big box Amiga owners out there who are suddenly going to drop everything they own and switch to a Walker.

Perhaps, rather than simply rearranging everything in the case design and adding this new bus, Amiga Technologies should have done what they have always said they are doing and build on the strengths of the Amiga. Surely some form of video expansion like a built-in genlock, or a sound sampler, would have been of more immediate benefit to new users and build on the Amiga's much-trumpeted multimedia superiority.

In this global market, companies really ought to pay more attention to the connotations their name might have in other countries...





A built-in sound sampler would also mean that the Amiga could get some form of Internet phone access, another string in the Amiga's bow.

Then the surfer pack could really offer something new. Just imagine the scarce advertising: 'International calls at a local rate – they're yours with the Amiga!' Still, the machine I saw was only a prototype and there is plenty of time for changes before its selling period.

Fit for an Amiga?

All in all, the CeBit show doesn't really suit the Amiga market. There are far too many extremely serious people doing very grown up things on machines that have probably never even had a game of Tetris on them, and this small, different, company doesn't really fit in. Some companies who were noticeable by their absence, however, included MacroSystem, who, you would have thought, would be in their element showing off the Draco as a standalone video editing machine at a fraction of the cost of a similar Avid set-up, never mind the fact that it is Amiga-based. And Phase 5 were surprisingly not on the Motorola booth showing off a potential prototype of the PowerUp PowerPC accelerator card for the Amiga.

Even so, Haage & partners were on Motorola's stand showing off Storm C/++. An ANSI compliant C package with full support for Motorola's 060 and a GUI editor? Sounds too good to be true? Well, unless you speak German, it is. Translation is going ahead now for the manual, but don't expect it to surface for a couple of months, at least, in its English form.

Finally, I'm not sure if I have correctly conveyed just how it feels to attend CeBit, so I'll try again. Unless you have a fortune to spend and reservations made, CeBit is like that favourite of Japanese television shows– Endurance. I really do feel like I've been put through the mill. Anyway, that's the news from CeBit '96. I'm off to soak my aching feet for a few hours...

Enough Amiga, what about other platforms?

In fact the new Amiga launch was probably the most exciting event at this year's CeBit, even though it probably interested less than one per cent of the visitors to the show.

Purveyors of wares for other platforms were overheard bemoaning the lack of interesting or new products, and several visitors I spoke to also complained about a dearth of innovative products. Still, I guess the new Amiga could be lumped in that category too.

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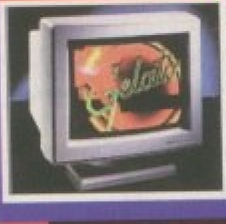
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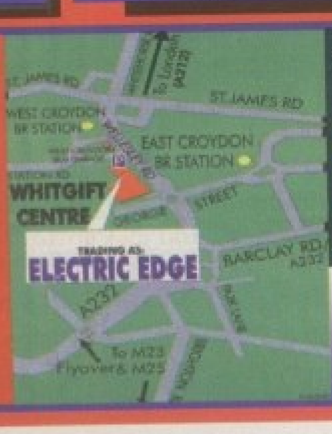
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Room for manoeuvre

Phil South reviews the latest extension for Amos, OS Devkit for **Amos Pro**

There have been a lot of extensions to the Amos language in recent years, and seemingly the development of such additions to the language has not abated even though most commercial development on the Amiga has taken a break to see what is going to happen next. If anything, development of add-ons for Amos has increased since both Commodore and Europress Software ceased to support the Amiga. OS Devkit for Amos Pro, written by Brice Fromentin, is a fine addition to these extensions, allowing you to use all the standard Amiga libraries, like asl.library, exec.library, gadtools.library,intuition.library, graphics.library etc.

INSTALLER STALLS

The system requires you to have Amos Pro 2.0 and above (it says 1.0+ but you can't use the compiler with anything below 2.0, can you?), Amiga OS 2.0 and above, and anything above a 68000 will do, so 060 drivers should watch their speed.

The program is a mere snip to install as it has an install program on the disks, but this does suffer from a slight problem in that department, however, because it seems to look for the APSystem directory under something called AmosPro_System. You could, I suppose, assign that name to APSystem, but I found the best way to install it was to copy the libs into APSystem and unpack all the other LZH files into a convenient directory like AmosPro.

Once the files are copied, you have to start Amos Pro and use the Set Interpreter command to point Amos to the lib file for the extension. That done, everything is in order.

The documentation on the disk is in English as well as French, but M. Fromentin is obviously not as fluent with the Queen's wossname as he perhaps thinks he is. Things like "for logical reason an 'Amos lock' send AmosPro to front" and "If you need V39 functions, test OS version before, this allow me to obtain faster command than AmosPro itself. Little sacrifices..." sound like me writing my column after a night out on the town.

The docs are somewhat fragmented in parts, and although they are on the disk as AmigaGuide documents (I hate on-disk documentation, don't you?), they will help you make sense of the procedures for making your own OS-legal Amiga programs. The installation and presentation of all the program elements could be cleaned up considerably, and this is something which will hopefully be solved now the program has a proper commercial distribution. Icons for all the documentation would be a boon, as would proper install scripts which would prevent any of the problems I encountered when loading the program the first time. It killed my Amos Pro by stopping the default configuration from being able to load, necessitating a complete re-install of Amos Pro – something which took time and effort and which I'd have preferred not to have to do.

That being said, OS Devkit is a splendid extension, but one that would definitely benefit from a better organised install procedure and properly translated documentation. Despite all that I give it an unreserved thumbs up for power, if not ease of use.

AC

OSSING AROUND

To make OS-legal Intuition-like programs you merely have to follow the new OS Devkit command structure. For example, to open a screen in Intuition, all you have to do is:

```
_scr Def Body 0,0,320,128,5
Hand=_scr Open
```

which means open a screen which starts at 0,0 with a width of 320 and a height of 128 pixels and a colour depth of 5.

To take another example, if you wanted to set the body characteristics of a gadget using GadTools, you would use the following:

```
_ggad Def Body X,Y,W,H
```

where X,Y is the location of the top/left corner, and W,H is the width and height. To refresh the contents of a window or requester using GadTools, all you would need to do is:

```
_gt Refresh Wnd WND,REQ
```

where WND and REQ are the pointer of the window or requester in question. The AmigaGuide documents on the disk describe all the functions and how to use them, although it requires a lot of experimentation (or an existing knowledge of how these things work) to make things zip along quickly. If you have a passing knowledge of Intuition then this will be easy. If you've never done this kind of thing before then a read of the demonstration Amos programs and a knowledge of schoolboy French will stand you in good stead.

One thing which did irk me a little bit was the fact that only one of the guide files with the command structures in had an icon, meaning that the only way to get them all working from a mouse click was to either add an icon for each file or click once on AmigaGuide, then hold down shift and click on the guide file. (You have to Show All Files in the menus before you can even see them to click on.

By the way: one technical thing which cropped up during the creation of the software was a clash between the Amiga OS Wait function and the Amos Pro loader. Brice has mended this by adding a PROC called _RENAMEAmos which, if added at the front of an Amos Pro program, will subtly alter the names of the programs in operation and prevent an erroneous "out of memory" message.

Bottom line

REQUIREMENTS

RED *essential* | BLACK *recommended*

2.04+ Workbench | Amos Pro

PRODUCT DETAILS

Product	OS Devkit Amos Pro
Supplier	Blittersoft
Price	£29.95
Tel	01908 261466

SCORES

Ease of use	55%
Implementation	70%
Value For Money	70%
Overall	70%

Very special *effects*



A special effects video? What's the **connection** with the Amiga? Read on as **Frank Nord** finds out

John Pasternak, so the blurb tells us, has been working in movies for over 20 years now, as director, actor and special effects guy (although I couldn't find any reference to him in the Internet movie database). He's presenting a series of video tutorials that make a nice complement to our video special last month as they all deal with creating impressive-looking special effects using items that are freely available in any town. The first in the series is called Android and deals with a single scene reminiscent of a certain James Cameron film where the baddie has to repair his arm and eye after being in a set of scrapes.

First of all you are shown the scene in its entirety, followed by a detailed description of how each effect was achieved. This starts with the retractable XActo knife with realistic spurting blood and goes on to opening the arm up for mechanical surgery. Each step is covered in very good detail, listing all the materials you will need to get to achieve the effects, and where you are most likely to get them from.

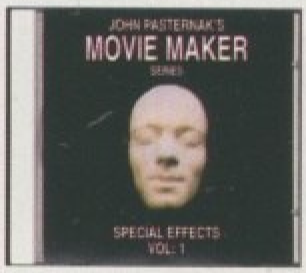
MAJOR REPAIRS

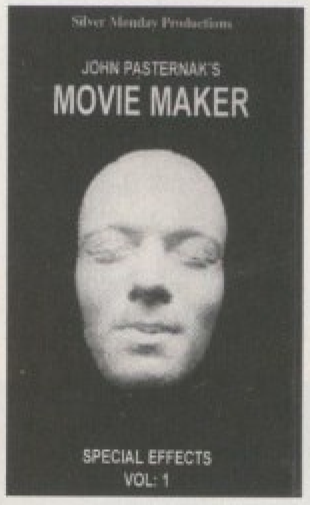
I found it very interesting to see the complete process involved in creating a latex mask which was used as the basis for an effect where the android pulls its eyeball out to repair it (this scene on the video was rather spoilt by the fact that you can see three hands in shot, unless of course, the android was better equipped than I thought). The process is a lot more involved than I had previously presumed. It starts with your actor's face getting fitted for a piece of cardboard, which is then placed to fit the face snugly. The actor is then given a breathing tube and dentists' impression gunk is spread all over. Plaster of Paris is spread over the gunk to give it added strength and once this is dry the whole shebang is removed.

That's just the first step though. Next the mould of the face is filled with plaster of paris again and left to dry for a few days in a warm place. It is then turfed out of the mould and placed on a board. Next it is trimmed of any remaining flash and waxed. Once this has been done, there are a few intermediate steps to tackle, but the next big job is to get those protective gloves on and start messing with glass fibre. The end result is a mould you can pour a latex rubber mix into, which, once set, will be your mask. This can then be painted using acrylic paint to make it look a bit more life-like. Sure, it isn't any animatronic masterpiece, but it is something you can do at home without having to spend a fortune. This is the whole basis for the tutorials on these tapes and it is one that works well. You won't be making Terminator 3, but you will be able to create effects of some sophistication with relatively little effort. Finally, in addition to the main exercise of producing the scene, there are a number of general tips such as how to get rid of the overly clean and harsh look of video.

One point about the video that was quite tiresome though. It may say that the tutorial is over an hour long on the box, but in actual fact quite a large proportion of that hour is taken up with timewasting shots which are unnecessary. It's unfortunate that you cannot even fast forward through these as it means that you might miss some of the voiceover.

> ***"Each step is covered in very good detail, listing all the materials you will need to get to achieve the effects, and where you are most likely to get them from"***





OPINION

As a whole, this video is a great idea, especially for you budding film makers roused by our feature last month. It provides a very easy-to-follow, step-by-step guide to creating special effects on a very tight budget. However, the editing of the tape really needs to be tightened as there are large gaps between the narrative which don't advance your understanding of the subject and are not aesthetically pleasing. Finally, this tape isn't suitable for children owing to the nature of both the type of special effects and the materials used to create them.

WHAT'S THE CONNECTION?

Well you might ask. The gimmick with this set of videos is the fact that you'll also be able to buy them on CD. No, it won't just be an Mpeg conversion of the video data, it will be a mixture of CDXL animation combined with CD quality sound and still pictures to present the same information, but in an Amiga-friendly way. The CD is planned to cost twice as much as the video, but then again, you hopefully won't have to put up with the long gaps where nothing happens.

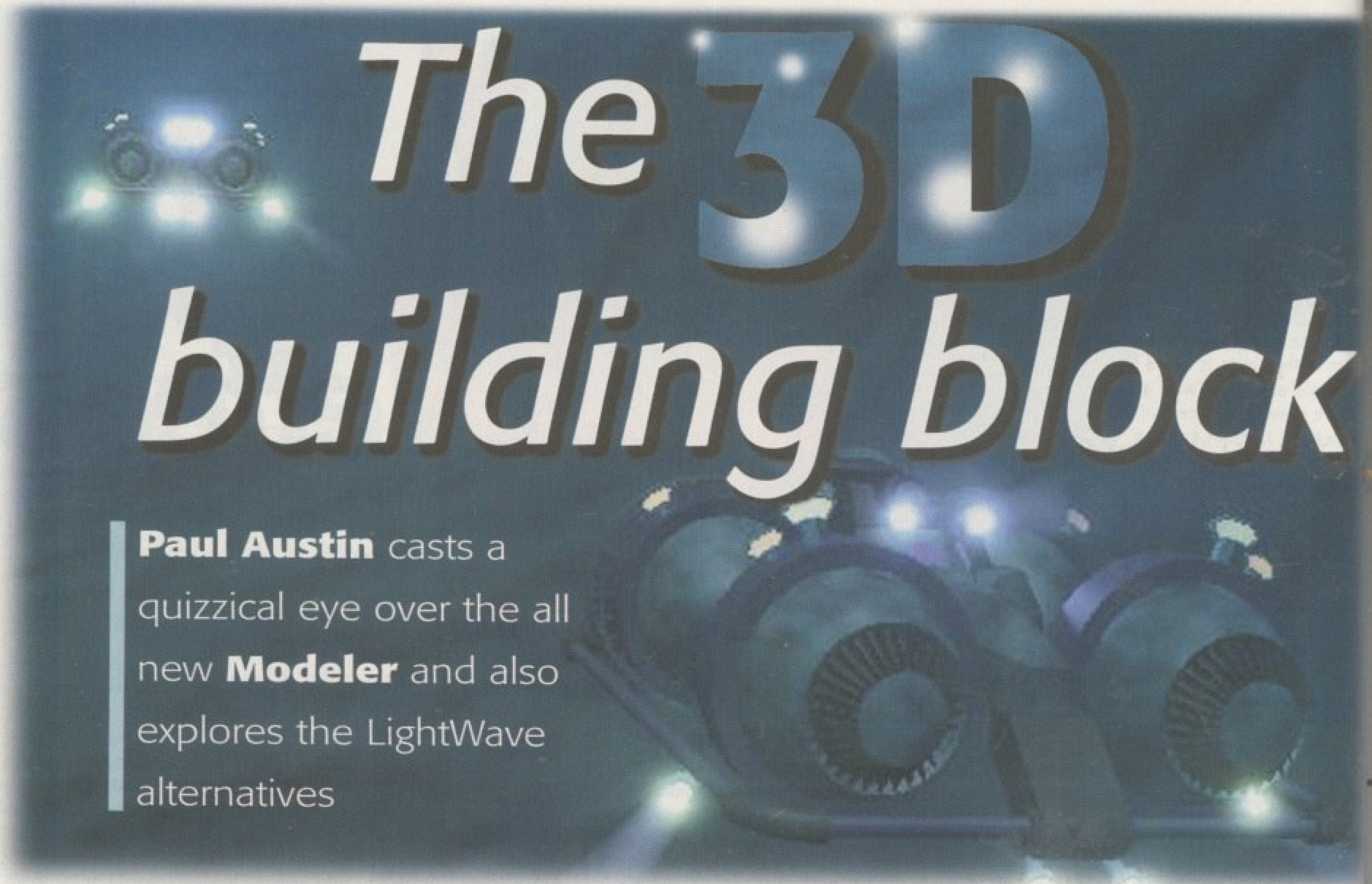
Bottom *line*

PRODUCT DETAILS

Product	Movie Maker Volume 1 – Android
Supplier	Epic Software
Price	Price: Video £14.99 CD-ROM £29.99
Tel	01793 514188

SCORES

Overall	**75%**



The 3D building block

Paul Austin casts a quizzical eye over the all new **Modeler** and also explores the LightWave alternatives

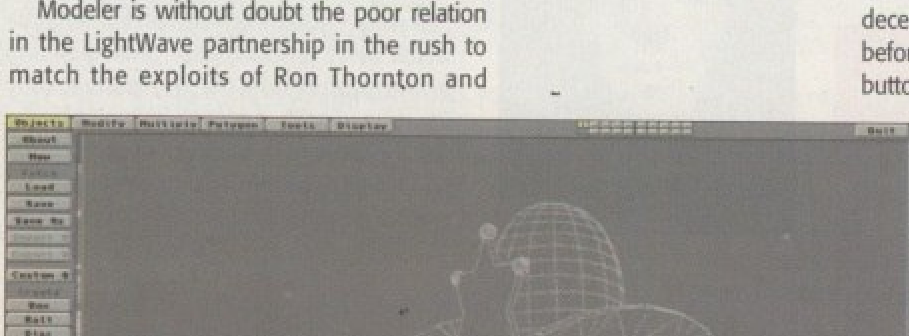
As promised, this month I'll be continuing the guided tour of NewTek's latest incarnation of their award-winning 3D design and animation system. This time it's Modeler's turn for a once over, but I'll also be exploring LightWave on the Amiga's arch rival. However, before inspecting the opposition's approach, it's time for a close look at the straight-man in the LightWave double act.

Modeler is without doubt the poor relation in the LightWave partnership in the rush to match the exploits of Ron Thornton and friends. The temptation is to dive straight into Layout and set about throwing things around the screen in the vain hope that by some miracle you'll stumble across a masterpiece. Unfortunately, that just ain't the way things happen.

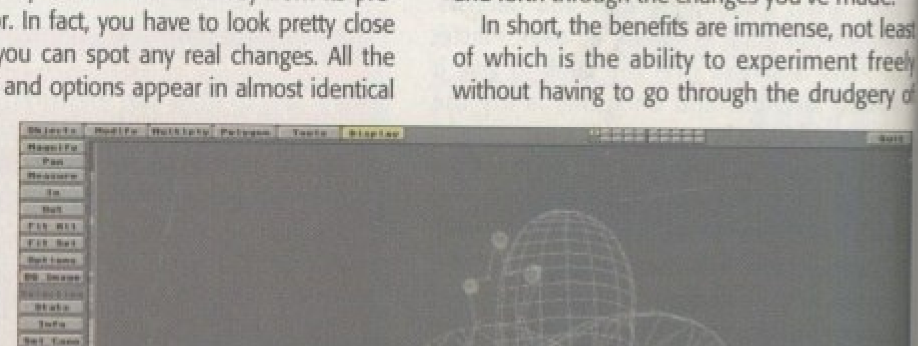
Similarities

As you can see, the all new Modeler 4.0 isn't exactly a million miles away from its predecessor. In fact, you have to look pretty close before you can spot any real changes. All the buttons and options appear in almost identical positions, but there is one very major, if invisible, update which many a die hard modeler hack has been dreaming of since the beginning. The update in question is the long-awaited addition of multi-level undo and redo. In the past you were limited to undoing only the last edit, but now you can go way back into the design history of your creations. And thanks to redo, you're also free to move back and forth through the changes you've made.

In short, the benefits are immense, not least of which is the ability to experiment freely without having to go through the drudgery of



The traditional solid view – either moving or static on a standard Amiga display



At first glance not a lot of difference from the solid view. However, look close and you'll spot internal surfaces and a layout that doesn't obscure parts of the model that are hidden in solid preview

CROSS COMPATIBILITY

NewTek have made a lot of noise about ensuring LightWave will have a standard interface and functionality across the board, whether it be Amiga, PC, SGI or whatever else. And to be fair, that's exactly what they've achieved.

The only real difference on an operational level is the inability to import and export models between Modeler and Layout. As mentioned, the vast majority of PCs don't truly multitask, therefore it's not an option – even under Windows 95. This inevitably means an awful lot of saving, quitting and reloading when making adjustments to the design and surface properties of your creations. However, given sufficient RAM, it is possible to load both Layout and Modeler, make your changes in one, save them out to disk, hop over to the other program, and load in the saved changes.

On the PC plus side, it must be said that actual screen update on the PC version is superior – given a decent 64-bit graphics card. When compared to the implementation of the higher resolution displays of the Picasso II, favoured on the Amiga version, the PC wins hands down. However, it must be said that the Picasso update and display options in general have improved quite dramatically since the initial beta release.

Aside from the resolution, the PC variant also offers a different approach to render previews. Unlike the Amiga, which uses multitasking to provide a full frame preview in either Ham, Ham8, or Picasso II, the PC opts for a small quarter-screen display within a pop-up requester in addition to a full screen alternative.

saving countless revisions of the same design.

Yet another simple, but nevertheless essential change is the redesign of the preview window. In the past, Modeler boasted a rather over-indulgent moving solid preview option. There's no doubt it looks impressive, but in practice it simply wasted CPU time, served no practical purpose, and most importantly, soon became very irritating.

"Fortunately, NewTek have finally done the decent thing and added a usable, static, solid preview selection to the existing options"

PREVIEWS

Fortunately, NewTek have finally done the decent thing and added a usable, static, solid preview selection to the existing options, thereby providing a much more informative range of display options. In 3.5 the selection varied between none, static, and moving – in either wireframe or solid. Now that collection has expanded with none, wireframe, Frontface and solid – either moving or otherwise. As you'd expect, the wireframe option works as before, showing both the internal polygon structure and the points.

Next up comes the new Frontface option which, as the name suggests, shows only the external polygons of the object. However, as you can see from the screenshot, it also allows you to see external surfaces within the object – that at present may be obscured from the existing viewpoint.

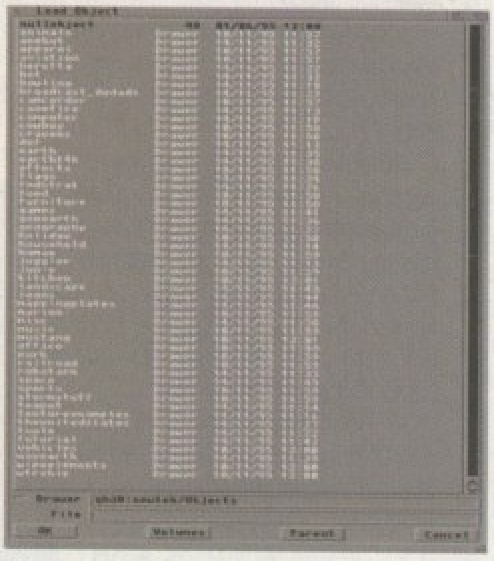
Lastly comes the static solid view which, not surprisingly, works just like Frontface, but delivers a true solid 3D image of the model. It must be said this is slightly slower to update than the others, but in my opinion this is a small price to pay for the added clarity a solid – and stable – true 3D preview can provide.

Unfortunately for PC fans, combined moving and static display options are only available to the Amiga version. Because PCs can't multitask, a window in window animated display simply isn't an option.

Like their predecessor, all the display options offer the same orientation control, with wireframe still requiring a combination of the Alt key and mouse movement in order to rotate the object along any axis to generate the optimum view point.

The only other obvious change to Modeler is the arrival of a brand new button in the Tools department. Basically, this is Modeler's very own plug-ins option which awaits under the new Tools/custom button.

At first glance you could easily make the mistake that the Custom selection is just another incarnation of ARexx macros. However, there is a very distinct difference between the two. Basically, the Custom options are standalone programs which, just like Layout plug-ins, allow third-party developers to plug dedicated modelling applications directly into the Modeler interface.

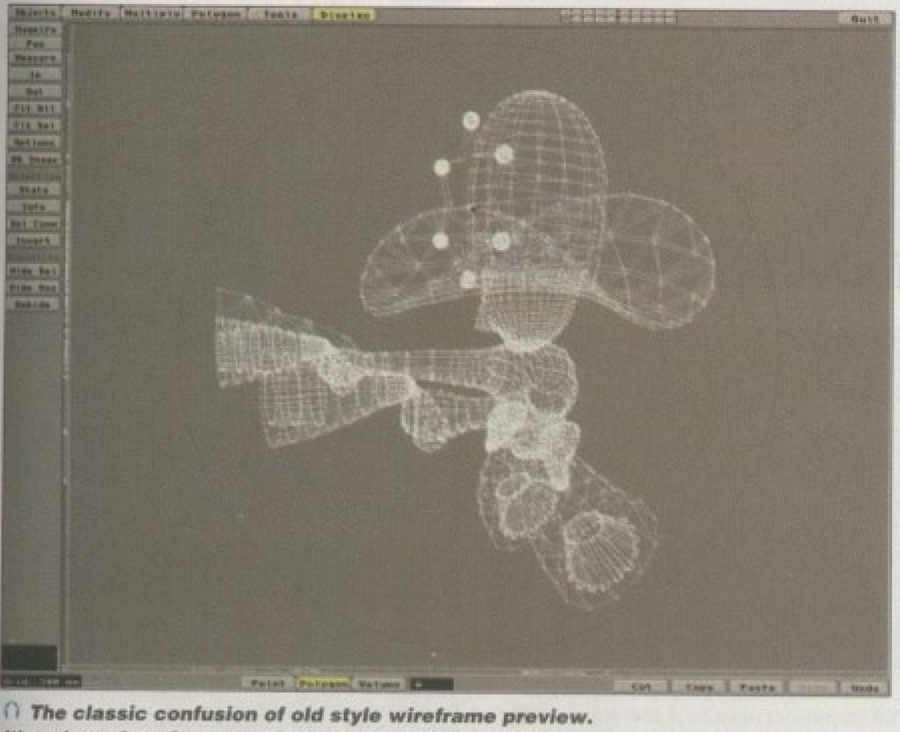


A boring screen grab it may be. However, it's an impressive example of the excellent collection of freebie objects that ship with the CD version of the software

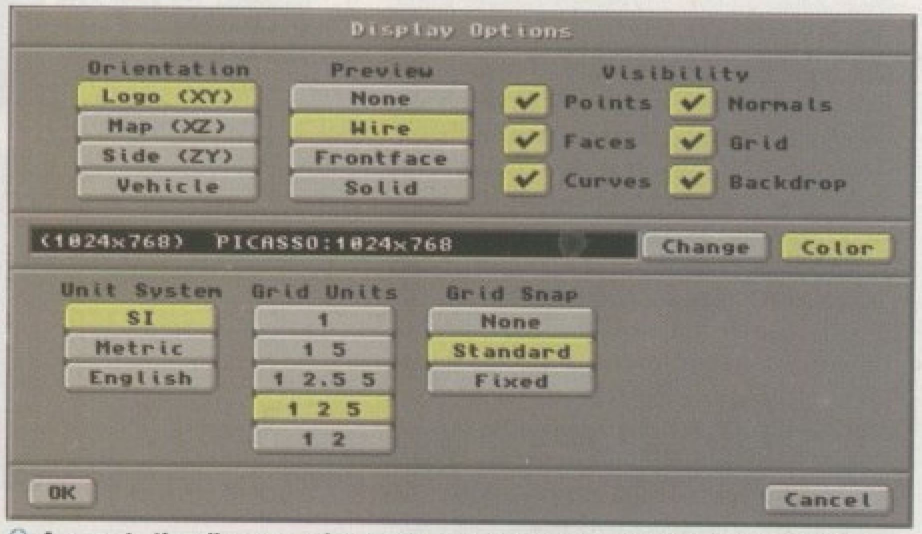


At present, the package only ships with five custom programs – the most notable, Powerview, provides a solid quick render of the preview display. Unfortunately, the option is limited to a one-off full frame preview which has to be closed down before you can continue modelling, although you can still rotate the preview by dragging the mouse.

Although limited at present, it does point the way to some interesting possibilities when it comes to automated modelling. It remains to be seen if Modeler custom programs get the same level of attention as their Layout plug-in counterparts – personally I doubt it...



The classic confusion of old style wireframe preview. It's only real saving grace is the ability to make point and polygon selections from the preview window



Access to the all new preview modes, but perhaps more important a selection of all the Picasso II's display modes. 1024X768 is the best of the bunch with a combination of excellent resolution and reasonable screen update

PC APPEAL

Ever since the news that LightWave was crossing the great PC divide, many have been predicting that 'the end is nigh, and the Amiga is no more.' This is predictable stuff, especially with a close inspection of clock speeds. However, there's more involved in 3D modelling than just raw speed.

Obviously, with PC clock speeds ranging from 66MHz right up to 133MHz there's no question that they can hold their own when it comes to brute rendering speed. However, this is by no means the whole story. During head-to-head testing a 66MHz PC renders at roughly twice the speed of a 25MHz A4000, but if a 50MHz 060 was added the Amiga's rendering speed quadrupled, thereby rendering roughly twice the speed of the PC – a figure which is still marginally faster than a Pentium P90.

Obviously, this throws the basic PC-goes-faster equation into turmoil. Do you spend a large amount of hard earned wonga on a PC, or simply upgrade your existing A4000 030 or 040 with an 060 processor? With the uncertain state of Amiga development and the outlandish hype surrounding the PC, it's tempting to spend the extra cash. However, life, and especially PCs, are never that straightforward.

As mentioned earlier, PCs in general are by no means under-powered machines. However, even with their impressive spec, they nevertheless display some serious limitations. For example, unless the PC in question boasts a large amount of RAM it will inevitably begin paging to disk as available RAM is depleted – reserving a set amount of virtual memory space on a hard disk is commonplace for memory-intensive PC applications.

Unfortunately, when paging begins performance plummets across the board – with particular sufferers being rendering times, wireframe generation and, more importantly, playback, effectively rendering it useless.

Basically, PCs are appalling at memory management. As a result, once paging the activated it will continue, regardless of whether real memory has become available since the peak RAM requirement which initiated the paging. Unfortunately, the only cure is to save out and re-boot the machine.

SNAIL MODE

This situation doesn't only apply to LightWave. For example, if you wanted to freeze LightWave and pop into another package, paging could kick-in, and you're straight back in snail mode on your return to Modeller or Layout.

In addition, PCs do not support shared resources like the Amiga. For example, a multitude of Amiga programs will happily share the same libraries, whereas each individual program on a PC will open its own duplicates of the same resources – which obviously eats yet more valuable RAM. Worse still, once opened, many external resources remain resident regardless of whether the application that initiated them is still using them or even still active. Poor memory management on the PC probably accounts for the fact that the recommended set-up for any serious PC LightWave system consists of a Pentium P90 with 32Mb of RAM. Formerly, Windows NT was the preferred OS, but with the advent of Windows 95 – which like NT also supports multi-tasking – 16Mb is just about viable as an alternative

The reason for the 32Mb preference on NT machines is a system requirement of 12Mb that is needed simply to run, leaving 20Mb free, a figure which should be enough to avoid the dreaded paging problem. The question is, though, after investing in a high-end PC, will the average user have sufficient funds for essentials like Photoshop 3.0 and all the other goodies that make a PC clone a viable graphics machine? I know I wouldn't.

Basically, the underlying message is that the road to faster affordable rendering doesn't necessary lead directly to the doors of PC box shifter. Simply running cash in hand to the local PC World and grabbing the first bargain PC system on the shelf, simply on the strength of its clock speed isn't a solution.

In reality, high power rendering on the PC has a high price, just like it does on any other platform. A PC, more than any other machine, is quite literally the sum of its parts. If an element of the equation is missing you could easily end up with a very expensive system that simply won't do what you need.

THE GREAT DIVIDE

As mentioned earlier, NewTek have gone to great lengths to make LightWave on all platforms as identical as possible. There's one thing, though, that even their best efforts can't overcome. It's true that both scene files and objects will happily load on any platform. Unfortunately, that still doesn't get past the naming limitations on pre-Windows 95 PCs.

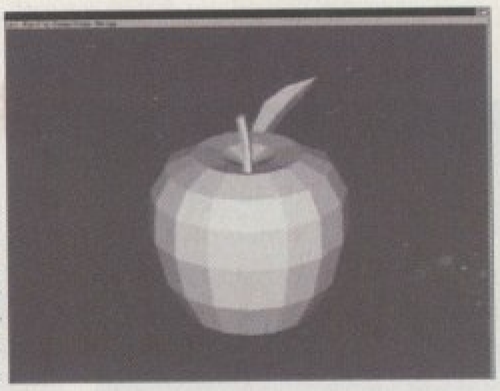
As you're probably aware, PC file names can only have a maximum of eight digits, plus a three digit suffix, such as Lwobject.lob. Obviously, Amigas don't suffer from such limitations and, of course, it's not something that third-party developers have considered in the past. As a consequence, most third-party products which automatically generate scene files or create objects will not travel well, especially if they employ a numerical suffix to name clones – null objects being a prime example. The only solution is to upgrade to Windows 95 or manually rename and replace all the objects which don't fit the PC naming criteria. In short, a good old fashioned pain in the backside – not impossible, but certainly not something you'd do if there was a choice, which alas there isn't.

The same problems apply to texture maps which your objects will call when loaded into layout, although if you can live with untidy file names, and the odd bit of re-selection, it is possible to copy files over 'as is' – at which point the PC will automatically concatenate the file names. The files will still load, but to be honest the ensuing confusion could well make reconstructing the scenes and surface attributes more hassle than simply renaming them prior to the move.

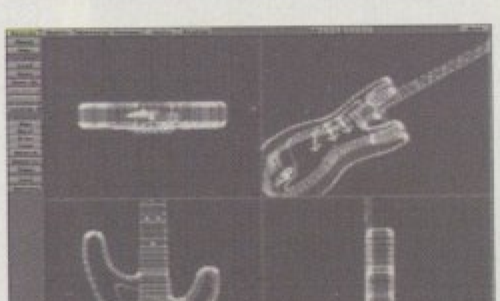
A FINAL THOUGHT

Although much improved and generally more stable, it must be said that Modeler certainly hasn't had the large-scale overhaul that Layout has enjoyed. But to be fair, with the preview problems resolved and multiple undo now active, there's little else that needs attention. NewTek are obviously taking the same approach to Modeller as they have in Layout when it comes to advanced add-ons to the system. Basically, the custom button does the same job as the plug-ins option in layout.

As for the PC invasion, I'd say it's still very early days. With the lack of any direct third-party support, and the hardware and software limitations inherent to the PC, it's really a case of spending an awful lot of money or none at all. With the price and performance offered by the growing band of 060s, the Amiga still looks in a strong position. The only real question is, will the PC's dominance of Plug-in development make the Amiga lose out in the long run?



An example of Modeler's newly found plug-in potential. It's early days but custom add-ons could well be the way forward for high-end design add-ons



The big picture running on a Picasso 1024X768 display. It may be a tad slower than a standard Amiga display but that's a small price to pay for the massive increase in clarity

Bottom line

REQUIREMENTS

RED essential | BLACK recommended

- 8 Mb RAM (essential)
- Hard drive
- 2.0 Workbench
- 16 Mb RAM (recommended)
- Picasso II

PRODUCT DETAILS

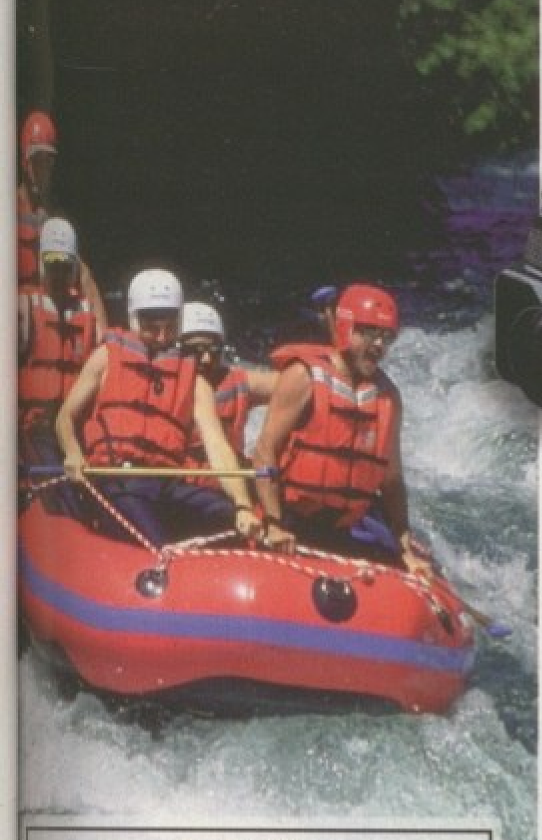
Product	LightWave
Supplier	Premier Vision
Price	£695 + VAT
Tel	0171-721 7050

SCORES

Ease of use	85%
Implementation	90%
Value For Money	82%
Overall	89%

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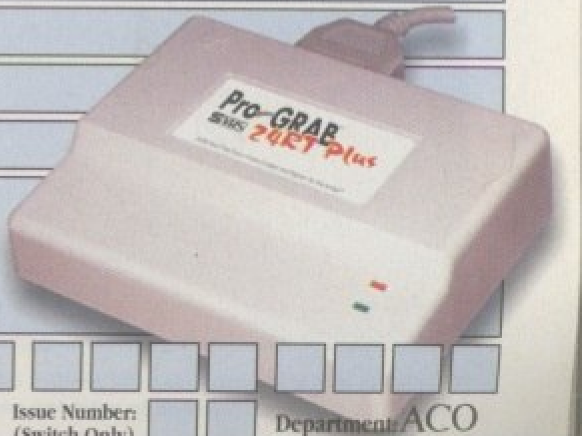
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Horror Sensation



Have you ever stayed up until the early hours of the morning staring subliminally at the television for no apparent reason? I hope so, because then I'll know I'm not the only one.

Usually after midnight there's always a cracking horror film on – probably from either the '60s or early '80s – and no matter how bad the special effects are, or the cheesiness of the music, you will be glued to your set. It doesn't finish there either. As soon as the film ends you realise it's time for bed, and then you will undoubtedly follow this routine... you'll snuggle up in bed and then Boom! A big monster springs out of your wardrobe and goes "Boo!"

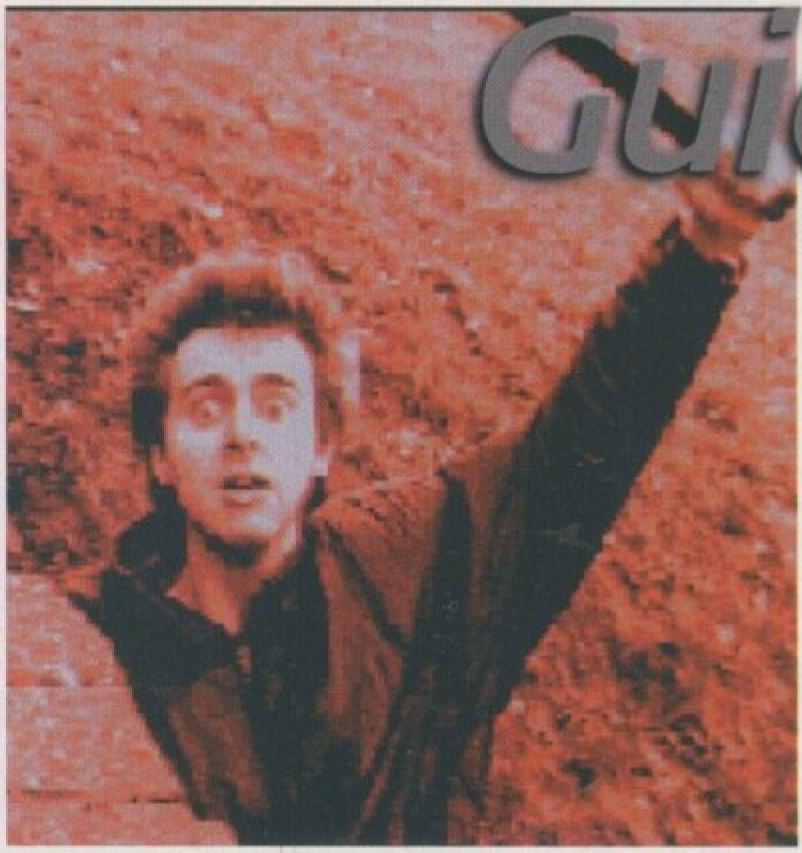
Horror Sensation will undoubtedly scare you as we travel into the oh so frightening world of horror. To me, horror isn't ghosts, paranormal activity or the X-files of any description. Horror is just gratuitous blood and guts, and for a brief description of Horror Sensation this fits perfectly.

Every horror-related Amiga file will undoubtedly be on this CD, be it sound samples, text files, images, FAQs, games or clipart – they are all here. And by the time you've searched a few directories, especially the images, you're stomach will be retching just like after your first rollercoaster ride.

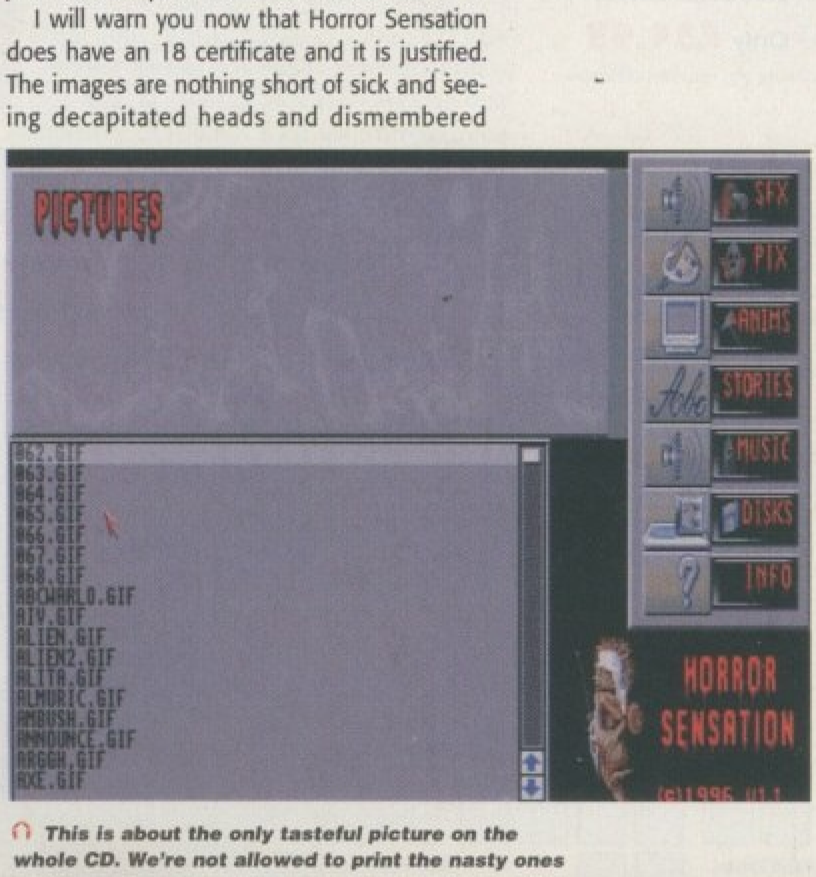
I will warn you now that Horror Sensation does have an 18 certificate and it is justified. The images are nothing short of sick and seeing decapitated heads and dismembered bodies doesn't really appeal to me. I will also mention that I'm not actually referring to any scenes from films or videos – I mean REAL LIFE pictures of bodies. Not a pretty sight.

There are also a host of good quality samples such as screams, blood gushing noises, splats and squelches – perfect for any home made horror films. The text documents contain strange fictional stories and it's all polished off by an excellent menu system whereby everything can be seen, heard and played from a click of a button.

Please! Only buy this CD if you think you can handle these gruesome pictures. You must not even contemplate it if you are of a nervous disposition. You have been warned!



Although this picture seems harmless, staring into this bloke's eyes will undoubtedly turn anyone into a psychopath



This is about the only tasteful picture on the whole CD. We're not allowed to print the nasty ones

Bottom line

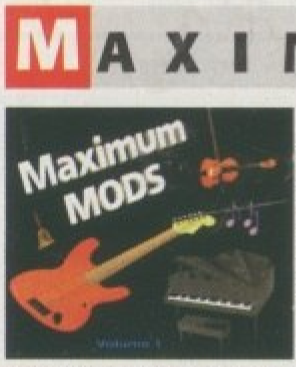
PRODUCT DETAILS

Product:	Horror Sensation
Supplier:	17 Bit Software
Price:	£19.99
Phone:	01924 366982

SCORES

Ease of use	90%
Implementation	89%
Value For Money	89%
Overall	88%

Maximum

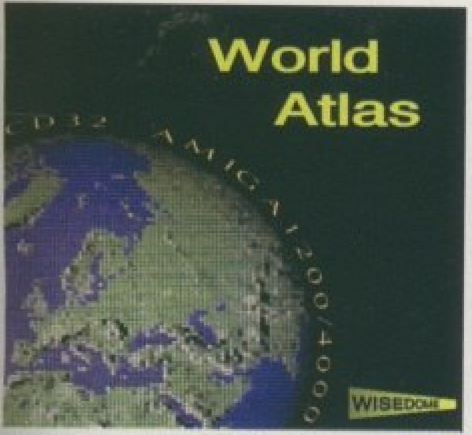


Music has always been simple to put together on the Amiga. At the most basic, all you have to do is pick four instruments to fill in each channel and play them all together. It doesn't matter if it sounds awful – label your track with the 'alternative' label and you can just about get away with it.

Maximum Mods is the first in the series of a long line in module CDs. However, something tells me by the time the second one comes out you probably won't have even got through the first because if you listened to every track on the CD all the way through it would last around ten days. That gives you and idea of how many modules there are on the CD.

A bonus is that the CD will run on the

WORLD ATLAS

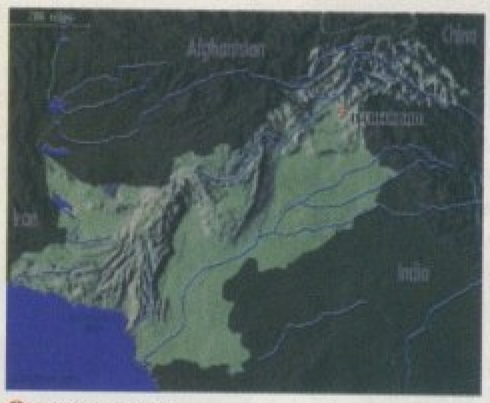




Here's another one

If you've ever wanted to see the rest of the world you usually have to either commit to backpacking or work your socks off to be able to afford a six month cruise, and only then can you stop off and enjoy the delights of each country.

Not any more. All you have to do is purchase this CD and you can learn all about thousands of different countries. If you can sit down and take in all the information it would probably take around six months, so all your mates will actually believe you've been around the world.



Here's a map

World Atlas was designed with Multimedia Experience and therefore has an extremely easy-to-use interface. All the fonts are large, so readable, but it all still manages to look presentable.

If you've ever wanted to learn about the world, you won't find a better package than the World Atlas. It contains information such as the population, death rates and birth rates, as well as the economic backgrounds of each countries. Although the graphics aren't particularly outstanding, it doesn't matter because the amount of information more than makes up for it. If you are researching the world for school, college, or university projects, or just for a general hobby, you won't be disappointed with what you find. The whole package is compatible with the A1200, A4000 and CD32, so the interface is controlled by either the mouse or control pad, selecting from all the menus on-screen.

World Atlas is a fantastic package for lazy people who can't be bothered going to the local library to pick out some books. Everything you need to know will be there right in front of you.

Bottom line

PRODUCT DETAILS

Product:	World Atlas
Supplier:	Wisedome Ltd
Price:	£29.99
Phone:	0181-570 3756

SCORES

Ease of use	94%
Implementation	90%
Value For Money	83%
Overall	90%

MODS VOL 1

CD32, so all you console owners will happily be able to crank out some Amiga mods while you're getting ready for a Saturday night. As for A1200 and A4000 owners, I don't think you'll be going out on a Saturday night because you'll probably be too busy making your own music and messing around with the ones that already feature on it.

The menu system is probably the best feature because it's so simple to use. By highlighting your selected mod and clicking a button it will load the music. There's no having to find menus, locating open buttons, and no confusing mod players. It's just a 'click and play' if you like!

There are also many different types of mods including jazz, soul, breakbeat, dance and many more. If you're looking for a particular style of mod you'll find it here – you can be sure of it. Apart from the D-Capo CD there aren't many decent module CDs but, thankfully, now Maximum Mods is here we're hoping there will be many more to come.

Bottom line

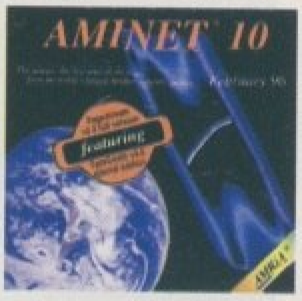
PRODUCT DETAILS

Product:	Maximum Mods Vol 1
Supplier:	Legendary Design
Price:	£19.99
Phone:	(001) 519 753 6120

SCORES

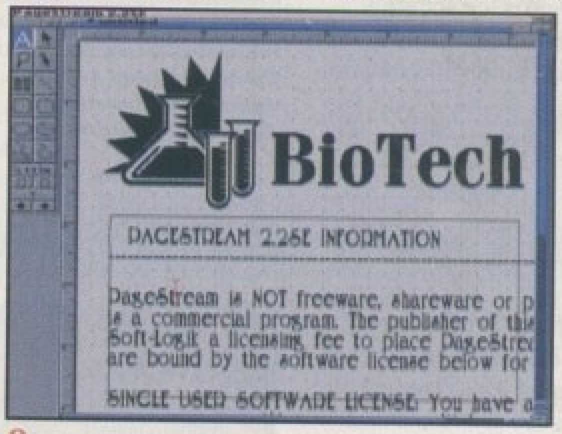
Ease of use	92%
Implementation	90%
Value For Money	85%
Overall	86%

AMINET 10



I'm am getting tired of writing this small piece here because sooner or later I will run out things to say.

I refuse to mention the great AmigaGuide that splits up the various categories which allow you to run or extract your programs. I shall not mention that the CD has all the latest uploads, and I definitely will not mention that the CD includes a wide range of business, games, comms, graphic, and sound software uploaded to Aminet from February '96.



As I mentioned briefly. Aminet 10 contains Pagestream version 2.2. So what more can I possibly say?

Right so there you go. The only thing I will tell you about is the full version of Pagestream. Er, there's a full version of Pagestream on Aminet 10. See, there you go. Buy it.

Bottom line

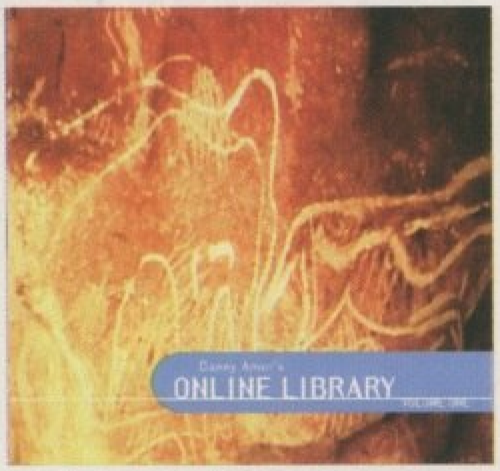
PRODUCT DETAILS

Product:	Aminet 10
Supplier:	GTI
Price:	£14.95
Phone:	+49 6171 85937

SCORES

Ease of use	91%
Implementation	88%
Value For Money	84%
Overall	89%

On-line Library Vol 1



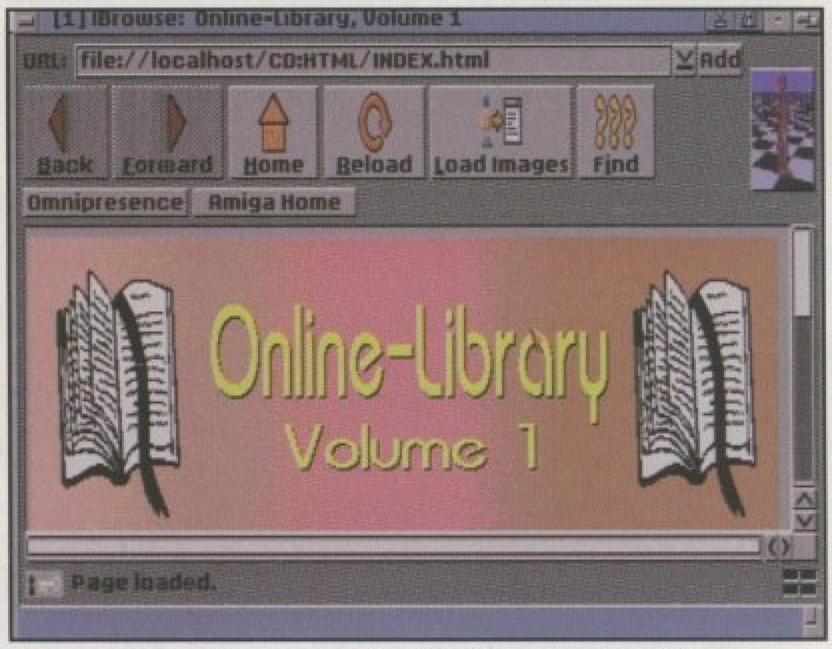
Over that last six months, more and more people have been connected to the Information Super Highway or World Wide Web either to send electronic messages to people from around the world or to view pages of information about millions of different subject areas

However, anyone who is connected will realise it's not exactly free. Firstly there is the expense of the actual computer itself, then a modem, then sometimes a connection fee, monthly charges, and finally the dreaded telephone bill.

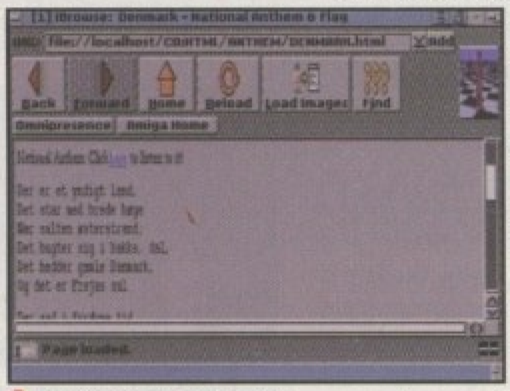
Now you can happily browse a section of the Internet without a massive telephone bill landing smugly on the doormat at the end of the month.

The On-line library CD contains many different topics of information which you can view via a 'Web browser', and for the Amiga you will probably need AMosaic or the brand new IBrowse. Now, the problem is this software.

Usually, when you are first connected to the Internet, your server will automatically post you the software needed to use it, and this includes the browser. Consequently, unless you're already connected you will have a tough job getting your own browser as you can't really go out and buy one from the shops. It's just not as easy as that. So if you are going to invest in this CD you'll have to be connected to the Internet.



The main menu for the On-line Library certainly lacks thought, especially in the design area.



Here you are. The much requested words for the Danish National Anthem. Join us next month for France's Eurovision entry

The CD contains topics that don't really appeal to me such as classical music, the words to every National Anthem, the Bible in seven different languages, and sections including economy, humour, laws, maths, poetry, politics and recipes.

Although all these subjects may do a good job of advertising the Internet to a certain spectre of the public, it doesn't really give you an idea of what really is on the Internet. If the CD included excerpts of the top ten sites, including the Playboy site, humorous, tasteless, and sport sites and, at a pinch, the daily newspaper, then that would probably give the public a realistic idea of what they'd find .

I can safely say that I have never ever seen anything like these documents on the Internet and this is probably because I never look for anything like it. The Internet is all about your own choice and you are given the chance to search anything you are interested in, be it naked women or your local football team. This CD defeats the entire object of the Internet and restricts what you can see.

If you haven't got access to the Internet, the On-line Library will present a nice positive angle on the content of the Internet. To sum it up – it's one to show your mother.

Bottom line

PRODUCT DETAILS

Product:	Online Library Vol 1
Supplier:	Amiga Library Services
Price:	£19.99
Phone:	(001) 602 491 0442

SCORES

Ease of use	75%
Implementation	89%
Value For Money	84%
Overall	81%

Workbench Add-on Vol 1

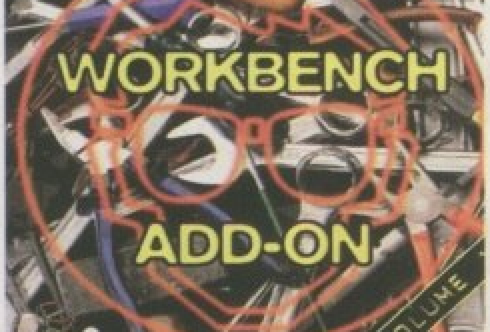
Workbench Add-on is also the first in a series, but this time features hundreds of Workbench hacks to make it quicker and far more efficient.

Workbench is the main user base where copying, running, viewing files has to be done. If you use your Amiga you will need to use workbench – it's a simple as that – and if you use it as much as us here at *Amiga Computing* then the programs on this CD are absolutely essential, especially if you're not connected to the Internet.

The CD is split into various directories for music, utilities, emulators and more. You will find most of them in a ready-to-run format where you can test them out without the annoying process of de-archiving them into your destination.

There are programs for all Amiga users including musicians, artists, programmers and even gamesplayers. Unfortunately, not all the programs are public domain. Most of them are shareware and contain unregistered versions so if you pay for them you will receive a fully registered version.

This is always worth doing if you use the program frequently because it lets the programmer know you use it, therefore they may possibly develop some additions or updates. Also as a bonus, some of programs on the CD have been reduced to a special price.



There are many Internet utilities available as well to make your connection more efficient and help you reduce that dreaded phone bill by making the access software quicker.

Inside the booklet you get with the CD there are various registration forms for products such as Amiga E, AmiWin, DFA, PowerPlayer, ShapeShifter and SuperView. All you have to do is fill in the form and send it away. You will then receive the latest version as well as the all important key file.

A lot of effort has gone into this CD to make it as simple as possible and while it contains programs for the novice, there are also many advanced programs to keep any avid Amiga user happy. All in all, Workbench Add-on contains some excellent programs which will undoubtedly come in use. It's certainly a worthy purchase.

Bottom line

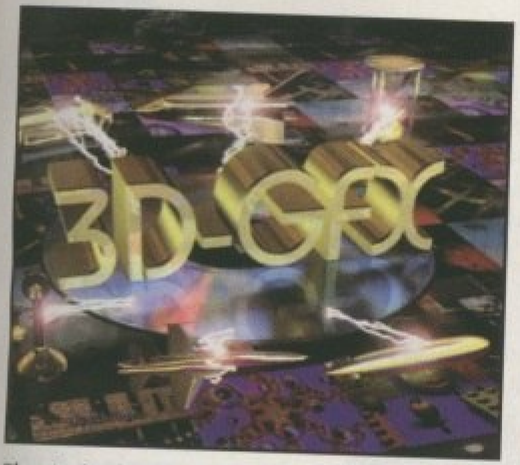
PRODUCT DETAILS

Product:	Workbench Add-on Vol 1
Supplier:	GTI
Price:	£24.95
Phone:	+49 6171 85937

SCORES

Ease of use	85%
Implementation	90%
Value For Money	89%
Overall	90%

3D-GFX



The Amiga's specialities often lie with its graphical superiority – there are countless television programmes associated with the Amiga.

This CD boasts hundreds of 3D utilities which will either get you started or help you if you are an advanced 3D artist looking for applications to make the process quicker and far more efficient and user friendly. There are demos of complete packages, objects, pictures and more animations than you can shake a stick at.

To view all the pictures you simply load up the AmigaGuide, click on the relevant sections, and this will automatically start up the animation and image viewers. For beginners there are demos of full packages such as Cinema 4D and PovRay so you can test them .

All the utilities can be found in the root directory of the CD and are categorised alphabetically. They range from graphic converters and viewers through to datatypes.



Here's a well known picture created with LightWave – one of many pictures on the 3D Graphics CD

All of them will come in handy for helping you design 3D graphics and therefore shouldn't be missed by any 3D art fan.

Bottom line

Product details

Product:	3D-GFX
Supplier:	PeeJay
Price:	£21.99
Phone:	0181-985 3850

Scores

Ease of use	90%
Implementation	89%
Value For Money	89%
Overall	90%

F1 Licenceware



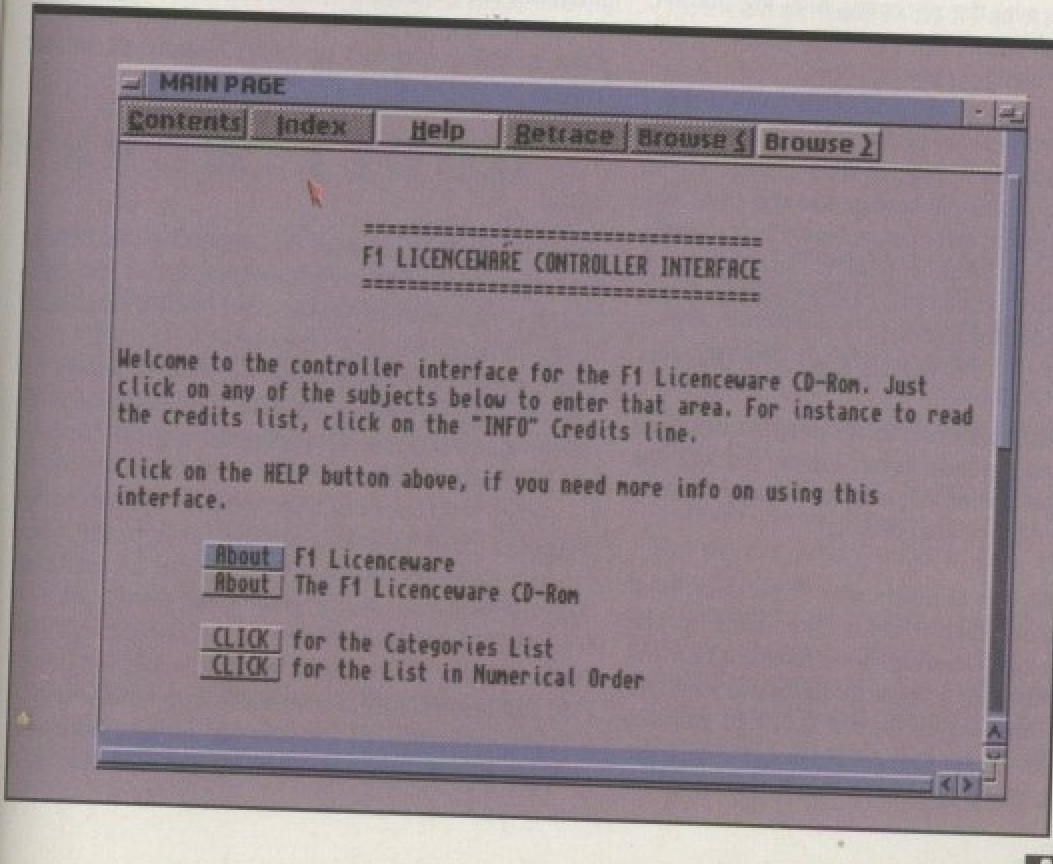
F1 Licenceware is another compilation of software, only this time it's not PD – it's actually all commercial software. Each programmer will also receive royalties so the software must be good if they are willing to pay for it.

If you load up the included AmigaGuide database you will be able to navigate the CD in the easiest way possible by clicking on the links.

These are split up into various categories such as games, education, art and graphics, not to mention a whole host of archived disks. The CD contains the collection of titles from F1-01 to F1-100 which means there is quite a bit of software.

The AmigaGuide database will help you either run the software or extract it to disk – around 80 per cent of the software will run straight from the CD. It contains programs such as Ultimate Quiz, Word Plus Pro, Fortress and Blackboard v3, as well as some Amos guides and supplements.

If you want a CD which is based around games then it may be a good purchase. However, the software was compiled from November 1995 so if you want the latest software it may be worthwhile checking out Aminet 10, especially as it's almost £15 cheaper.



The F1 Licenceware CD is polished off with an AmigaGuide database whereby you can run or extract the files

Bottom line

Product details

Product:	F1 Licenceware
Supplier:	Active Software
Price:	£32.99
Phone:	01325 352260

Scores

Ease of use	91%
Implementation	91%
Value For Money	72%
Overall	84%

esp

Keep your letters coming in to **Ezra Surf** and you could be a fifty pound prize winner



Keep those letters coming! If you can't be bothered to find a bit of paper and a stamp, why not e-mail us? Simply point your mailer to: ESP@acomp.demon.co.uk There's a £50 pound prize for the best letter printed as an incentive

BACK TO (WORKBENCH) 96

In Ben Vost's article 'Workbench 96?' he takes a very detailed look at what the Amiga of the future should provide. As a loyal user, I found this to be a fascinating article, creating a virtual chain of what the next Amiga should be, link by link. But I did notice some links left unaddressed, most of them involving the future of the hardware.

To start off, I thought the idea of putting Kickstart onto a flash ROM was an excellent one. Modular VGA-type graphics boards also made sense. Just about every idea was well thought out and should be seen in future Amigas. Specifically, providing sound for all users was a great idea, but one that needs pushing further.

The Amiga cannot move into the future having superb graphics but continuing to allow 8-bit sound to be a weak link. The modular idea for graphics cards should also apply to sound cards.

Another hardware issue is the lack of standardisation. The A1200's all-in-one design makes it restrictive to certain types of expansion, such as graphics or sound cards. Keeping the physical design the same for all Amigas will save third-party developers having to produce several versions of the same product to be compatible with the different designs.

Also standard on future Amigas must be storage devices. High density floppy drives, large hard drives and CD-ROMs are all a must. It is almost impossible to buy a new computer (an IBM clone, at least) without a CD-ROM drive and a massive hard drive. This would free software developers to create their products without concerning themselves with fitting all the information on low density floppies. In turn, this would reduce the disk-swapping involved in things like installation or loading.

Being a student at the University of Cincinnati (a major engineering university), I witness the immense use of the Internet and the World Wide Web. Not only are they entertaining, they are also very effective forms of communication. For example, my calculus professor posts our class syllabus on his home page *(I bet that's riveting – ed.)*. With my Amiga as it is now, it is a rather complex process of program installations to be able to access this information. In the future, Telnetting and Web browsing functions should be integrated into the Workbench and, in addition, each Amiga sold should have an internal 14.4k modem firming up the communications links of the chain.

The PowerPC processor will be just one of the many strong links in the chain of the Amiga, but in order to maintain an edge over the upcoming Intel P6, the PPC must be integrated into all the new Amigas to provide a consistent base of blazing speed.

These changes in the aspects of the Amiga are i mportant ones that I feel are crucial to the survival of the Amiga. When compared with another computer the Amiga must stand out to the average Joe and make him see that they are getting more computer for their money.

If the Amiga is to be successful, it must provide a strong base for both veteran and novice users, and with these ideas, I see it doing just that.

Jeff Rampe, Brecksville, Ohio USA

It's funny how many different things people want from their Amigas, and I wonder what exactly we will see from the next generation of Amigas. Anyway, over to Ben for his comment on your letter...

Putting all the Amigas in boxes with Zorro slots, what a great idea and one that AT seem to be taking up. The new A1200+ that everyone has been talking about will be just that, a box with a separate keyboard with two Zorro slots in it, opening up the world of RTG graphics cards to everyone. As for the sound side of things, the Amiga still isn't doing too badly. The sound from an Amiga still ranks quite highly considering the technology it is based upon is many, many years old. But, sure, it would be nice to see an improvement there too and making the whole thing modular on a plug-in replacement basis is undoubtedly the best way forward.

The only thing I'm worried about is all these extra things people want to put in the base machine. How much are you all willing to pay for an Amiga? Adding CD-ROM drives, modems, networking and 'massive' hard drives all costs additional cash. I believe every Amiga in the world should have a hard drive, as standard but I would rather see the Amiga continue as a cheap, but good quality, hobbyist's machine, rather than ramping the cost up to or beyond PC or Mac levels.

BUDGET WORRI

I'm a bit worried about all this upgrading business. Six years ago I got an A500 for Christmas which cost nearly £500. It was state-of-the-art then, with thousands of good games. Being only nine-years old I couldn't afford many games, and the only real expansion I bought was a 512k upgrade for £34 which let me play some of the newer games. Great. Only £550 for a great computer which played all the games.

Today, £400 buys you a five-year old computer which requires extra hardware to play some of the newer games. Okay, so not many games need an accelerator yet, but if people start upgrading for games, programmers will start programming for these machines, perhaps needing 3 or 4 megs, etc. The whole Amiga market will lose its appeal as a home computer – imagine buying an Amiga which was out of date when you bought it! Pushing the price up by over £200 on top of

PART II

Ben Vost's article on improving the Amiga was interesting, but I disagree with him on where the efforts need to be mostly concentrated. Firstly, we must **not** turn the Amiga into 'just another Macintosh or PC'. I don't use the Amiga because it's almost a PC or Mac. I use it because it has unique qualities that the PC and Mac will never have in a million years. In any case, only those qualities which will benefit the Amiga directly should be considered. Here's what I feel should be concentrated on for both current and future Amigas:

1. High density 1.76Mb floppy drives should become standard on every Amiga including the A1200.

2. All new Amigas should have the following video outputs:

- The standard Amiga video out for genlocks and 15kHz monitors
- A composite video out for connection to a TV or VCR that is intelligent enough to display a blank screen when a non-NTSC/PAL display mode is selected, instead of just displaying a weird mess.
- A hardware flicker fixer port that can connect directly to a VGA monitor which can display 15kHz modes on a VGA monitor and pass through higher rated modes untouched.

3. The new base A1200 should come with a 68030 at 50MHz and 4Mb of FastRAM as the new low-end standard.

4. Implement a new graphic chipset that can display hundreds of graphics sprites even on a VGA monitor, and offers chunky as well as planar access for all screen modes. Also, add 3D algorithms, smooth VGA scrolling and full 24-bit color for screenmodes up to 640x480 in the hardware. A 16.7 million color 320 x 200 fast chunky pixel mode with sprites would make for truly impressive games!

5. A full chipset upgrade should be made available as a simple motherboard swap for any Amiga, for upgrading the A500, 600, 1200, 1500, 2000, 3000 or 4000 to the new chipset. Motherboard swaps are quite popular with the PC crowd these days, and for good reason. Imagine simply popping out the motherboard in your old A500 and popping in a new motherboard with AGA+ graphics, an IDE hard drive interface, a 68030-50 and 4Mb of FastRAM as standard!

6. Ditching the Amiga chipset is a bad idea. Instead bury it in the machine somewhere so it's always available on **any** Amiga, although another graphics chipset/card can be used in its place.

7. All future Amigas should come with a built-in LAN connector.

8. Improve the serial connector with a much larger buffer space and consider changing it to a nine-pin connector to conserve space.

9. Implement a stereo FM chip and a stereo 16-bit DAC into the Amiga as well as a microphone connector with an ADC and a line in with an audio mixer.

10. Add a SCSI-2 connector as standard but ignore the requests to ditch the IDE interface. Keep that for cheap hard drives and CD-ROM devices.

11. I agree that adding in a built-in speaker would be a good idea but why not have built-in stereo speakers with a volume control on all new Amigas? Just make sure that plugging in external speakers automatically deactivates them. This might entail a switch to a mini phono plug for audio out, a software-controllable switch, or an actual hardware switch on the back of the machine.

12. Also, a WB4.0 better have some sort of built-in RTG capabilities just like Ben said.

Let's hope Amiga Technologies hear our requests and really revives the Amiga like it deserves to be. I can't wait to get my hands on a PowerPC upgrade for my Amiga 1200. The future of the Amiga finally shines again.

Terry Miller, Bartlesville, Oklahoma USA

***sigh* Back to Ben again...**

Right, let's go through your points one at a time...

1. Agreed, and already stated.

2. Agreed, particularly with respect to the screen blanking for inappropriate modes.

3. How much do you want to pay for this machine exactly?

4. I do believe that there has to be a change in the way the custom chipset is programmed so that it can deal with chunky pixel programming at resolutions where planar is inefficient, ie. anything over 64 colours in low resolutions and over 32 colours in high resolutions. But I'll refer you back to my answer for 3 when you start talking about 24-bit screenmodes at any resolution...

5. The reason motherboard upgrades are popular with the PC crowd is because they are cheap, standard and easy to fit. I don't know if you've ever tried removing a motherboard from an A500, an A1500 or an A3000T like I have, but I can tell you it's no picnic. Besides which, having to make new motherboards for all these machines will drive the cost up higher than that of supplying a completely fresh machine. If AT standardise their case style as the previous reader's letter suggested, then, perhaps, a motherboard upgrade can be offered in the future

6. See 3.

7. See 3, but in principle I agree. Adding the software to allow for networking is more important in my opinion. People can always use the serial port for a SLIP connection, they don't need a dedicated ethernet port.

8. Agreed. Speeding it up would be a good move too.

9. Hang on, I thought FM sound was worse than the Amiga's. Isn't FM synthesis the sort of thing they do on really cheap PC sound cards and consoles which is only a waveform generator? As for the rest, see 3.

10. See 3. IDE devices aren't that much cheaper than SCSI so the saving for the end user wouldn't compensate for the lack of standards.

11. How much room do you believe will be available for shielded speakers in these new Amigas? I think supplying one speaker gives people enough sound to be going on with. The A3000T automatically switches the internal speaker off if there is something connected to the audio connectors on the back of the machine, so you don't need a switch.

12. It had better have an awful lot more than just RTG compatibility.

an already high price. The Amiga is turning into a PC and if AT do bring out an A1200+ that has an '030 the A1200 will need to be upgraded to be usable. I agree that expanding your Amiga will make it quicker and greater overall, but if it starts a trend then we will all have to spend more money upgrading, trying to keep up with the new standards. This will make the Amiga look more expensive, less like a home computer and more like a PC.

Zenon Olenski, Timperley

I think you've got your dates a little wrong there, Zenon. The Amiga 500 was state of the art way back when in 1988, not 1990, and cost £500 until about the middle of that year. But at that time, a half meg expansion would have set you back around £110, not £34. But as for what you say about upgrading your machine, I would have to say you are talking tosh. The computer industry moves faster than a cheetah with diarrhoea, and it won't stop just because you don't want to spend any money. Computing is like any other hobby, it costs money to keep it going. And don't you want any games that push the Amiga to the full?

Aren't you one of those people who want Doom or Duke Nukem on your machine? Well, they won't run unless your Amiga is fast enough and has enough memory.

The fact of the matter is that the Amiga is only a cheap machine initially, thereafter it is just like any other computer. The major benefit is that you don't have to lash out all the cash at once, but please don't expect to get the best from a base level machine.

BACKLASH

£50 PRIZE LETTER

And so it starts; the somewhat unfortunate but perhaps wholly predictable backlash against Amiga Technologies. I suppose we were all led such a merry dance during the dreadful Commodore years that we cannot control our in-built and painful cynicism about the gurus (no pun intended) who are now responsible for the welfare of our chosen machine.

It is, of course, all too easy to hunch over our computer and complain bitterly about the mistreatment being dealt out by AT, but could I beg everyone to stand back, take a deep breath and for God's sake CHILL OUT! It ain't that bad.

People were discontent that the Amiga had not been on sale for over a year; there was concern that the new buyer would just pinch the technology and be damned with the home computer market; an upgrade was needed urgently; dirt cheap prices were required; the future path of the technology was in some doubt.

I think it's fair to say that Commodore were at fault over the sale of the company. Typically, they were unable to organise their own funeral effectively because they were too busy trying to screw the biggest buck out of some poor sucker. There's no doubt that the UK management buyout was the most favourable option from a user's perspective – better the devil you know and all that – so when Escom pipped it at the last moment the trepidation was palpable.

And yet, Escom/AT have shown a remarkable commitment to the technology which has certainly surprised me. Let us put ourselves in AT's shoes. Having just spent in excess of $10 million on a product that everyone thought was dead, what were they to do? AT owned the Amiga, but at the time it comprised a few bits and bobs of hardware scattered around the globe with no guarantee that AT could get their hands on any

of it anyway. So, with a logical – indeed, necessary – eye on the Christmas market, AT resolved to put the Amigas back in the shops in time for the Yuletide celebrations. They were therefore starting from scratch and, lo and behold, they did it. Even then, grumblings were afoot about pricing, but given that production was ramped up so fast I think we should count our blessings, particularly as the blow was softened by an excellent software bundle.

If the term cock-up can be levelled at AT, so far there are really only two areas that spring to mind: incompatible floppy disk drives and Scala MM300. The first is forgivable as incompatibility arises only with certain games and AT have made moves to sort out problem machines – the onus is now on AT to ensure that fixes are made quickly and efficiently (that is, after all, what the promotion of customer satisfaction is all about).

The second is a bit more thorny. There is no doubt that Scala MM300 is a magnificent piece of software and the option to bundle it couldn't be ignored, but AT really should have foreseen the lack of memory problem with a standard A1200 and made it clear from the outset that the program won't run in 2Mb of memory. This is most definitely a customer service cock-up worthy of Commodore, but even so, I don't believe it is insurmountable.

Readers may remember that Scala HVT100 (the bottom of the range version, for the uninitiated) was given away on a coverdisk some time ago. I have used it on my A1200 ever since as it represents one of the most intuitive and user-friendly programs I have ever seen. Okay, so it doesn't exactly stretch the AGA chipset – in fact it doesn't use it at all – but it does emphasise that the Amiga is the most friendly tool for this kind of work. Most people who see my home videos gasp in wonder at the professionalism of the titling, even though I only choose from four fonts and work in a maximum of 32 colours. If, therefore, Scala HVT and MM300 were *both* bundled with A1200s then users could get an immediate glimpse of the capabilities of the machine. An exhortation to upgrade could also be included – 'If you think this is great, get an extra 2Mb and let MM300 really change your life' – you know the sort of thing.

Maybe I'm just being naive, or maybe I've just owned my machine too long, but I genuinely believe that the Amiga has a strong future, both as a games machine (where the main user base still is) and as a home productivity tool that is second to none for ease of use and flexibility. So let's stop whining; instead let's enjoy and be proud of what we've got and let us look forward positively. Just wait for the PowerAmiga, it's gonna be a killer.

Jamie Winter, Waterlooville

Finally, one I get to respond to. Your well-reasoned argument has persuaded me to let you have the £50 prize for this month, not something I give lightly. I think you are completely correct in your view of how AT are doing. When you think that they have gone from nothing to producing Amigas inside a year, that's a pretty impressive feat in its own right.

But you are also correct in pinpointing the two major failures. The Scala situation is pretty unforgivable since I know that Paul Austin and Ben Vost brought up the problem of memory and hard drive space when Escom held their press conference in May last year.

Originally, Scala was to be bundled with all machines. Perhaps AT should install HVT100 as standard on all hard drive equipped A1200s, but leave MM300 for A4000T owners who would be able to make use of it immediately.

AMIGA COMPUTING FIRST AGAIN

His headline, not ours

I often buy a copy of *Amiga Computing* and more often it seems you are first with news articles. I think the other magazines try too hard to be first on the shelves and then get a month behind with news and articles. Several times I have read interesting items in *AC* before the earlier released other magazines. When my subscription to another magazine runs out soon I will be subscribing to *AC* instead.

As a keen Amiga using astronomer I have been interested to find more details about a program I heard about on the World Astronomy Fidonet echo called Digital Universe. Looking at all the astronomy magazines, one would be forgiven for thinking that the subject was only catered for by the PC, so a new and apparently killer serious application for the Amiga is of particular interest to me.

The Amiga has a great range of software but the amount of scientific software is very limited and a program like this can do much to improve the Amiga's (rightful) image as a serious machine.

Another magazine with the initials AF had a sort of astronomy article in their Christmas issue and a half promise of a Digital Universe review in the January issue, which never materialised. I was delighted to see a copy of *AC* in my newsagent which had the first review I have yet seen. The review was good and highlighted some of the improvements which could be made to the program such as better image quality and support for graphics cards (although the latter won't affect me).

There were a couple of factual errors such as the Cassini mission going to Jupiter instead of Saturn and the odd mention of parallax in relation to Copernican theory. By the way, the heliocentric idea was first thought of by Aristarcus of Samos – an ancient Greek.

I have already sent off to Canada for more info on Digital Universe but was glad to see an independent review beforehand. The review does not state whether the program can be obtained in the UK or whether you have to order from Canada, though giving the price in UK pounds was very useful. It is a pity DU comes on 14 disks and there is not a CD version as yet. The rival Distant Suns and upgrade First Light will be available for the Amiga on CD according to the distributors Chaocity.

Despite praising AC, I do have one gripe. News and articles are good and usually first. However, there is a glaring (and quite insulting to an astronomer) error on the contents page. There is no way that Digital Universe is an **ASTROLOGY** program. Astrology is fortune telling superstition which has absolutely nothing to do with the real and far more fascinating science of astronomy.

William Eaves, Thurso

I don't know why we don't just rename this column 'Ben Vost replies' for all the words I am getting in edgeways...

I believe, Mr Eaves, that if you are still getting the aforementioned magazine, you will find the review you looked for of Digital Universe in the March issue. I have been talking to Dan Charrois, the programmer of Digital Universe (that he created the whole program and documentation on his own is a testament to his perseverance and worthy of an award of some sort in its own right), and he tells me that much of what I suggested will be implemented in the next version of DU, including more colourful images and a CD-ROM delivery system. As far as I am aware, DU is still only available directly from him, but he does reply very swiftly so it will probably only take you a little longer to receive your copy than if you had ordered it in the UK.

As for the errors in the review, mea culpa, I got it wrong. But the astrology/astronomy cock-up on the contents page can be put down to a philistine who neither knows nor cares about the difference in the two subjects. "It's all to do with stars isn't it?" was his reply.

AND FINALLY, BEGORRAH...

I feel I must congratulate your art department for its marvellously inventive use of a pint of Guinness (spelt with two 'n's incidentally) to indicate that AC97 contained an article on Irish Amiga users.

But why stop at the pint o' porter? Ireland has a wealth of stereotypical cultural images to choose from. I realise that it may have been hard to get a decent render of a leprechaun, but surely a few shamrocks liberally doused around the front cover wouldn't have been that difficult, begorrah!

Otherwise, thanks for a well-balanced and informative magazine, now thankfully devoid of those irrelevant little electronic symbols. However, I still feel that the next time I write an article on the British Amiga scene I would be honour-bound to include a piccie of a football yob with his Union Jack-waist-coated bulldog attacking a roast beef and yorkshire pudding-eating, bowler-hatted, gentleman outside Big Ben as is so often the scene in your capital city, n'est-ce pas?

Pat Jackman, Danagh, Wexford, Eire

To be sure, you're right, so you are. 'Twas a terrible thing to do, but our art editor is a desperate man, so he is, so I hope you'll be forgiving us. What a Kerry man thing to do, eh? Actually, the cover image we were trying to get would have been the DigitalWinter shot used in the article, the one by Tony Patrickson. However, when the crunch came, the powers that be wanted something a little more obvious and commercial, in order to attract occasional readers (who are interested in drinking presumably), so it wasn't used.

As for your article, when are you going to send it to us? Seriously, we welcome any contributions by our readers. If your writing is any good, then we will probably end up using you on a regular basis. If you want to send us a sample of your writing, you can write a piece of about a 1000 words on any Amiga-related topic. It can be a review, a tutorial or a feature about local Amiga use. It doesn't matter if your review is of an old product, it's your writing we want to look at. Send your articles on an Amiga-formatted disk as ASCII text and include a printed version along with any pictures you would want to use in the piece (either as screenshots saved as IFF or the original photos). The address to send your submissions to is:

New writers
Amiga Computing
Adlington Park
Macclesfield, SK10 4NP
England

BEGINNER BASICS

acas

amiga computing advice service

Helping you to sleep easier at night, ACAS will soothe all your troubles away

Please help out an Amiga beginner with Workbench. Some of these questions are probably stupid but I have worked through the manual, plus two Bruce Smith books, without finding the answers and I'm getting desperate. I have a plain A1200 with an external drive and a Cannon BJ 10sx, and I have no hard drive.

1. I am customising my WB 3 disk, and although I can drag the goodies in from the Extras disk, I am unsure of the destination drawer. For instance, I have put the Init Printer in Prefs and double-click it every time I boot the machine. There must be a way to run Init Printer automatically on boot up? Also, where should the other items in the Tools drawer be placed on the WB3 disk – is there some rule that I have missed?

2. My printer setup works on readme and doc files, but every so often I get a *'Cannot open your tool much more'*.

3. What are these libraries and where do they live on the WB3 disk? I have seen that PD libraries offer disks containing extra libraries – do I need them?

4. When I access the Tools menu the only item is WB Setup. Where are the user-startup and startup-sequence that I am supposed to use?

5. Why do I get 'checksum error on block 1703' when I try to copy my working copy of WB3? All my blank disks cannot be faulty, perhaps this is a protection problem?

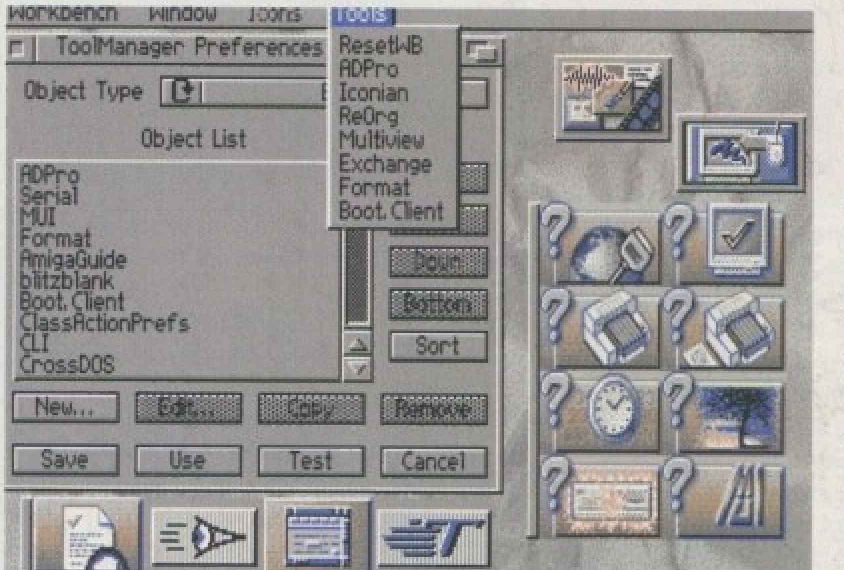
6. New programs seems to need more than 2Mb. How much do you recommend I add to keep ahead of the trend?

Dorene Cox, Essex

1. I hope you are using copies of your original Workbench disks because if you destroy one of them it is a real nuisance trying to get hold of replacement copies. When coping programs across to your Workbench disk it does not matter where you place them. It is generally expected that you would put them in either the Tools or Utility drawer, and if it gets to the stage where you have quite a few programs cluttering these drawers you might want to consider creating further sub-directories and move the appropriate programs into these.

If you want a program to run automatically from Workbench 2 you can drag it into the WBStartup draw. Each time Workbench starts all the programs in this drawer are executed, saving you the trouble of having to run them all yourself. There are a couple of things I would query about what you are doing. Firstly I do not think it is necessary to run the Init Printer program because when you turn on your machine or your machine resets it sends the same message to your printer.

The other thing I must say is why copy these programs off the other Workbench disks? You have a second drive so why not just insert the disks in there and run them off their original disks?



Toolmanager lets you easily add menus, docks, icons and hot keys to your Workbench programs

2. Either I am the one getting a little confused or you are confusing the things you are doing. Normally you only get the 'cannot open your tool blardy blar' when you double-click on a file's icon that is not setup correctly for your computer. This has nothing to do with how your printer is setup, and is to do with how Workbench tries to run programs and the tools specified by icons.

In the case of MuchMore, this is a tool used to read text files. If you click on the icon and select *Information* from the Workbench menu, you pop up the icon information requester. In the default tool gadget there will be the text MuchMore. If you edit this to just read More or MultiView and press save, when you double-click the icon you will be able to view the file using the program More.

This sort of thing is a constant pain for Amiga users. Because there are so many different text readers around you invariably end up with the 'cannot open your tool blardy blar' requester. There are a couple of ways around this. You can either use a tool alias program that allows you to substitute programs such as MuchMore for another program you have, or you can use Toolmanger – it was part of our beginners coverdisks on our January issue – which allows you to place an AppIcon on the Workbench that you can drop files into. If you do this with Multiview you will be able to view text, sound, graphics and even animation files of any Datatype you have installed.

3. Another source of constant problems for beginners and experienced users are the Amiga's libraries. In fact, the Amiga's entire operating system, called Kickstart, is made up of shared run time libraries which contain program routines that allow programmers to open windows, screens and do other jiggery pockery. They are called shared because many programs can use them at once, and they are run time as they are only loaded into memory when necessary.

Amiga libraries can exist both on your Amiga's ROM and on disks, and allow new or updated libraries to be added at a later date. Normally, as in the case of your Workbench disk, they are stored in the Libs drawer on the root of your Workbench disk.

You can find this by selecting *Show all files* from the Workbench window menu. Generally if you get a program that needs extra libraries other than the standard Amiga libraries, they will be supplied with the program archive or on the same disk. The only exceptions to this are the MUI libraries as they are too big.

In day to day use the only really vital third-party library that you should have is called ReqTools. This has been around for a long time and as such is used by a fair few programs, but again it is fairly small – about 40k – and is normally supplied with any program that uses it.

4. I take it you are talking about the Workbench tools menu, in which case there is only meant to be the one entry. There are programs out there that allow you to add your own programs to the tools menu – Toolmanager being one but,

unfortunately, as standard there is no way to add things to this menu in Workbench – another over sight by Commodore.

The startup-sequence and user-startup scripts are found in the *S* directory hidden on your Workbench disk. You should not change you startup-sequence and do not have to touch the user-startup except to remove entries. To modify these files you need to run a text editor, and the simplest way is to open a shell and type Ed s:user-startup. This will then load the standard text editor with the user-startup file.

5. I would think this means you have an error on your WB3 disk and not the disks you are copying to. If you are going to be constantly copying to one disk then it is inevitable you will get some sort of disk error. The only way to fix this is to get hold of a file recovery program. One of the best is Disksalv – version 2 is shareware and is available from any decent PD house – or the more up-to-date version 3 is a commercial product but does provide more comprehensive tools.

Another disk tool worth getting hold of is Reor. As you are constantly copying, deleting and moving files on your disks, the free room on the disk gets split up into small sections and can make disk access very slow. Reorg reorganises your disks so all your programs are stored in the most efficient manner.

6. Not only should you consider the amount of RAM you have, but also storage space and processor speed.

The most commonly used programs such as Wordworth and Final Writer now need several megabytes of space along with the normal Workbench files, libraries and devices. This all adds to you needing a fair bit of storage space, the only real answer being a hard drive.

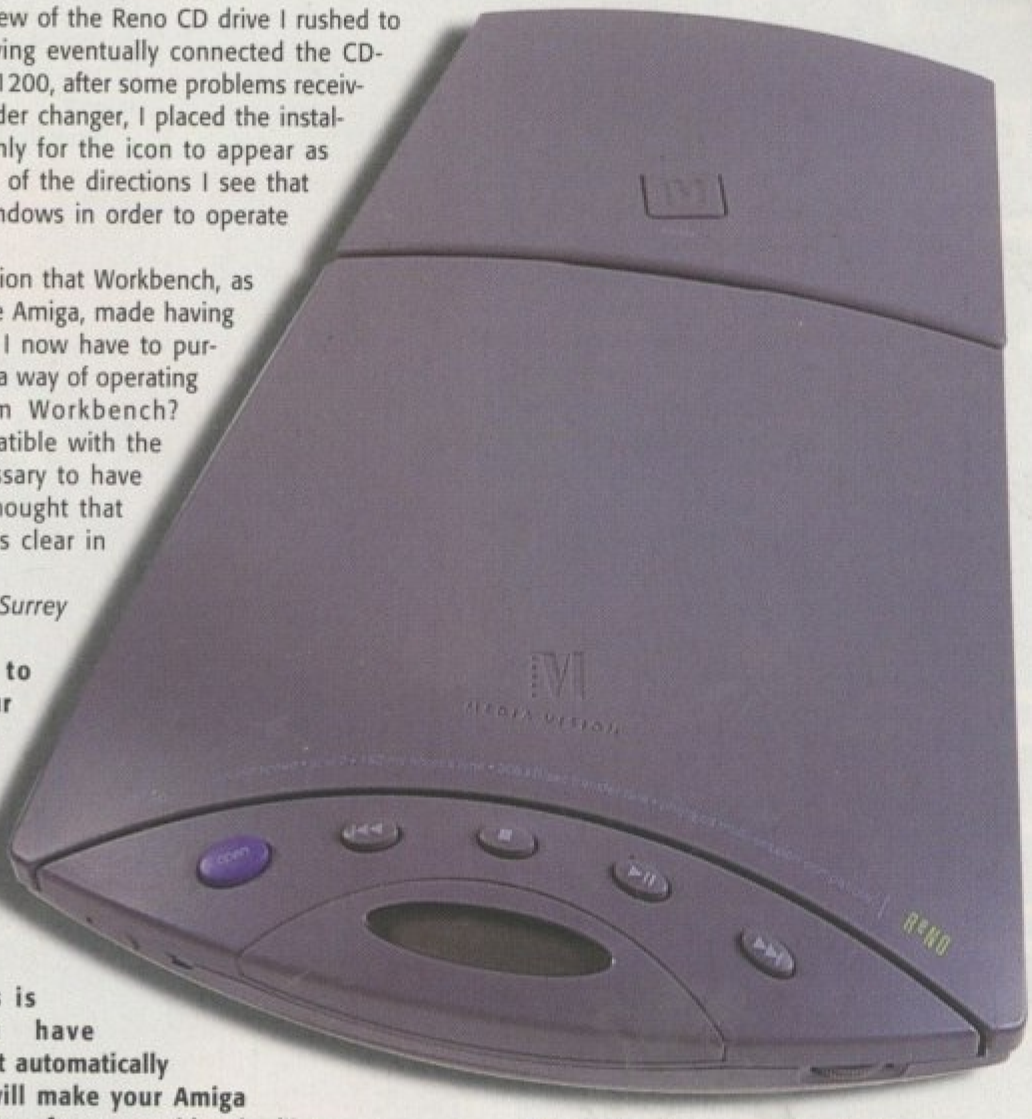
When it comes to RAM, you can never really have enough. You do not actually say what you plan to use your Amiga for, but if it is for word processing then adding another 2Mb will be enough. The thing is, accelerators are so cheap nowadays that it is worth considering getting one instead of a plain RAM board, and as most applications are aimed at the base A1200, any speed increase is always very noticeable.

RELUCTANT RENO

Following your review of the Reno CD drive I rushed to purchase one. Having eventually connected the CD-ROM drive to my A1200, after some problems receiving the correct gender changer, I placed the installation disc in DF0, only for the icon to appear as DF0:???. On closer reading of the directions I see that one has to be running Windows in order to operate the CD-ROM drive.

I was under the impression that Workbench, as the operating system of the Amiga, made having Windows unnecessary. Do I now have to purchase Windows or is there a way of operating the CD-ROM drive from Workbench? Indeed, is Windows compatible with the Amiga 1200? If it is necessary to have Windows, I would have thought that you would have made this clear in your article.

M Fleming, Surrey



Small, portable and perfectly formed. The Reno drive makes a good choice for a CD drive

You seem to have got your wires crossed a little here. To solve your main problem you need to get hold of, but should have received with the Reno drive, the AmiCD-Handler software. This is because unless you have Workbench 3.1 you do not automatically have the software that will make your Amiga recognise the CD drive. This software provides the file system that will allow your Amiga to read any CD drive connected via a SCSI interface.

Once you have got hold of the AmiCDHandler software you need to install it. This is much easier than it may sound because you install the software using a standard installer script. All you have to know is the name of your SCSI device – if you are using a Squirrel this is *squirrelscsi.device* – and the SCSI Id number of the Reno drive – this can be set on the Reno drive itself. Once this is done you can run the device driver and the wonderful world of CD awaits you.

I think I should clear up a little confusion you are having about Windows. I would guess the disk that came with the Reno drive was a HD PC disk that the A1200 cannot read which is why the DF0:???? icon appears. Windows is the operating system written by Microsoft, and it comes in a number of flavours – the most commonly used being Windows 95 for PC IBM compatible computers – and you are right in thinking Workbench makes needing Windows unnecessary, and also that Windows is unavailable for the Amiga. If Windows 95 was available for the Amiga you would need an A1200 with 16Mb RAM, an 040 processor and a 1/2 Gb hard drive, and even then it would not do anything more than Workbench already does.

CD CONCERNS

I have recently decided to join the CD-ROM revolution and would like a few questions answered.

The unit I am considering is the Power Computing quad-speed CD-ROM, if I can afford it. I currently have an A1200 with a 120Mb hard drive, 4Mb Amitek Hawk FastRAM expansion with no FPU and two external floppy drives. I would like to know if the drive will work with this setup and if the later addition of a 33MHz FPU would have any effect on the system.

Additionally, I also have access to an A1500 running Kickstart 3.1.

This machine has a GVP HC8 hard drive/RAM board with an external SCSI connector. Would it be possible to use the CD drive with this machine if a suitable cable could be obtained.

Mark Henderson, West Midlands

As far as I know the Amitek board will work fine with 4Mb of RAM, in as much as any of the RAM expansions work fine, as long as only 4Mb of RAM is used. Normally, if plain RAM expansions, not accelerators, have more than 4Mb the PC slot is made redundant as the RAM expansion uses the same address space as the PC slot, so the processor cannot access the PC slot.

This does not effect accelerator boards as they use their own address space which allows them to access much more memory than a standard A1200 – up to 128Mb.

Adding a FPU should also have no effect on the CD drive, but you do not need such a fast FPU because using a 33MHz chip on a standard A1200 will only give you a slight speed increase over using a 20 or 14Mhz version. Data is still supplied and taken from the FPU at 14MHz so a faster FPU is standing idle much of the time.

To get the CD to work with the GVP interface you will not only need the correct connection but also the correct software. If the machine has the full Workbench 3.1 software then there is a CD DOS driver supplied with it. To adjust this for use with the GVP board you need to drag it from the storage drawer over to the Devs DOS drivers drawer. Pop up the information requester and change the *Unit* entry to the SCSI ID of the CD drive, and change the *device driver* name to that of the GVP device drive – this will probably be something like gvpscsi.device. Once everything is connected up you can double-click the DOS driver icon and the CD drive should be available.

acas

Do you have a problem? Do you sometimes find yourself poised over your Amiga with axe in hand, spouting profanity at the stubborn refusal of your software or hardware to behave properly?

Well, calm down and swap the axe for pen and paper, jot down your problems, along with a description of your Amiga setup, and send it off to Amiga Computing Advice Service, IDG Media, Media House, Adlington Park, Macclesfield SK10 4NP. Alternatively, e-mail us at ACAS@acomp.demon.co.uk

SIMPLE SAMPLE

I have a stock A1200 and am looking to buy a 16-bit sound sampler that has high quality recording with a minimum of hiss. I would be willing to upgrade the A1200's processor and RAM if the sampler required it, any suggestions?

Ben Finowski, Ohio USA

If you wanted 8-bit sampling then there would be no problem as both the Technosound Turbo and Mega-Lo-Sound samplers provide good 8-bit sampling. Unfortunately, 16-bit samplers are only available for big box Amigas.

The best solution currently available for the A1200 is the Aura sampler made by HiSoft. This gives your A1200 the ability to sample and replay stereo 12-bit samples, the software that comes with it lets you manipulate 8,12 and 16-bit quality samples, and OctaMED v6 supports it so you get an extra sound channel to play about with.

You say you have a plain A1200, but if you are going to be playing around with 12/16-bit samples a hard drive is going to be essential, and extra memory would be a great help as both these are going to allow you to sample at higher rates and longer lengths of time. If you do not know, the higher the sample rate in KHz the better the quality, but the more memory space they consume.

Having a hard drive will also allow you to sample direct to disk, so essentially letting you sample very long periods of sound.

When doing this the speed of your processor and hard drive will dictate the top quality you can sample.

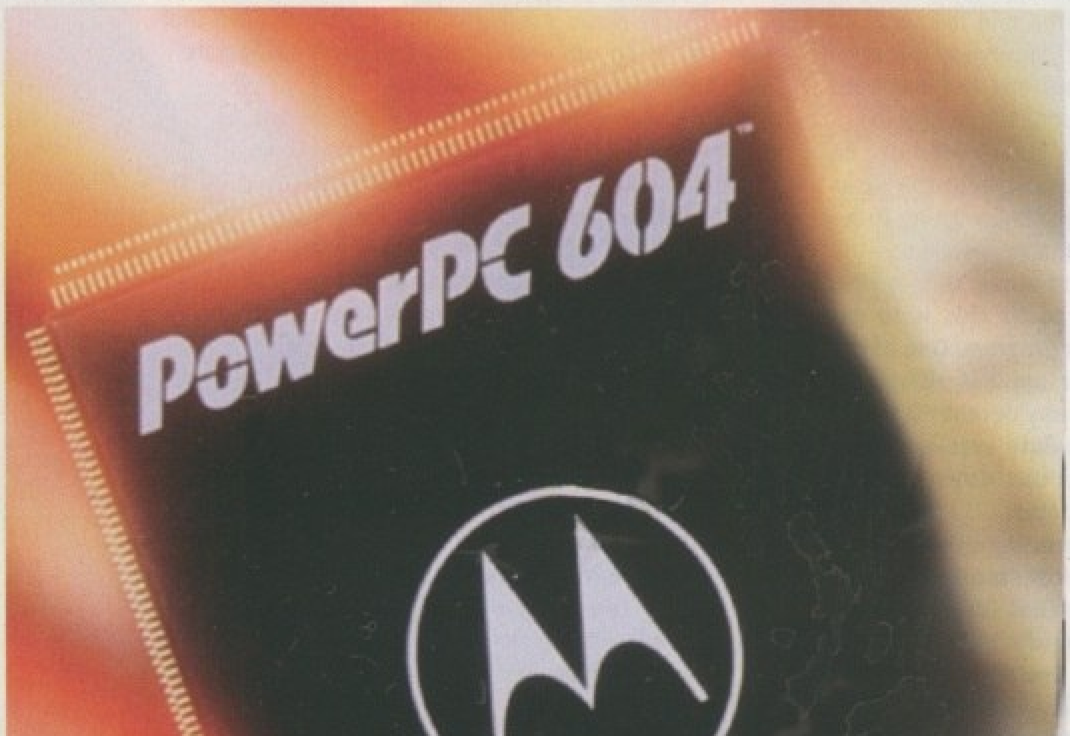
POWER UP

I have an A1200 with a 120Mb hard drive and two simple questions. When do you think the PowerPC boards will be available for the A1200 in the United States and what will they cost in cold, hard US dollars? I will appreciate as much information as you can give me on this subject.

Secondly, talking of money, can you list the price of things in American dollars as well as UK pounds, or better yet why not print a UK vs USA currency equivalency table as a matter of course in every issue?

Something like that sure would help us on this side of the pond.

Christopher Mohr, California



The PowerPC chip promises to revolutionise and rejuvenate the Amiga

The original release from Phase 5 states that PowerPC boards will be available mid 1996.

These will be available in a number of configurations, initially from 'low-end' 100MHz MCP603e up to 150MHz MCP604 boards. There are also plans to develop high-end systems that will be packing 300MHz MCP620 and will include 64-bit wide memory and bus systems, with an optional PCI bridge. The initial price range is from DM1000 up to DM2000, which translates roughly to £450-£900 or $675-$1350. Obviously, things are still at an early stage and the final specifications and pricing could, and probably will, change.

Along with the board I would expect you will get PowerPC software support. As a PowerPC processor will be able to run Emulated 680x0 code faster than your A1200, some sort of emulator will come with it. Along with this you will also get CyberGraphx 3 which is going to give the Amiga proper RTG support along with a set of new 3D libraries.

Personally, I cannot see why we could not print the prices in US dollars, but I will have to see what our production staff have to say.

Jargon box

AppIcon – *introduced with Workbench 2, an AppIcon is an interface to a program, or an Application's Icon. When you run a program it can place a new icon on the Workbench in to which you can drop files that will then be loaded straight into the program*

Datatypes – *a system standard that allows any program that supports them to load any installed Datatype file. So a program that supports picture Datatypes can load ILBM, GIF, Jpeg and any other picture Datatype you have installed*

Rom – *Read Only Memory, refers to part of the computer's memory that can only be read from and not written to, compared to RAM that can be both written and read from*

Root – *directories are said to be ordered in a tree fashion, with directories existing in other directors and so on. The top of this tree is called the root directory. So RAM: is the root of the RAM directory*

Archive – an archive refers to a number of files that have to be collected into one file which is then normally compressed. This makes transmitting many files a lot easier

Device Driver – *a special piece of code that lets the operating system access new devices and filesystems, such as PC/Mac/Zip disks*

FastRAM – *so called FastRAM on the Amiga is memory that cannot be accessed by the custom chip. Because of this the processor has unrestricted access and program can be run faster from 'fast' RAM than from 'chip' RAM, as there is no access conflicts with the custom chips*

PC slot – *also known as the PCMCIA slot, this is a interface standard mainly used on portable machines*

FPU – *Floating Point Unit, a specialised chip or part of a chip that is dedicated to calculating Floating Point equations. Floating point numbers allow computers to store very large and very small numbers, which they could not do easily otherwise*

PD – *Public Domain software is referred to as PD. Any software that is entirely in the public domain can be copied and used by anyone, but there are normally restriction imposed by the writer of the software*

HD – *when connected with floppy disks it means high density. These disks can store twice the amount of data than a normal DD or double density disk, but you need a HD disk drive to read them*

KHz – *refers to how many times a second a sample should be taken. So a 16-bit 40KHz sample will take 40,000 16-bit samples a second*

Public Sector

Nothing ever happens in Cricklewood. But as Dave Cusick can testify, the Amiga PD world is rather more interesting

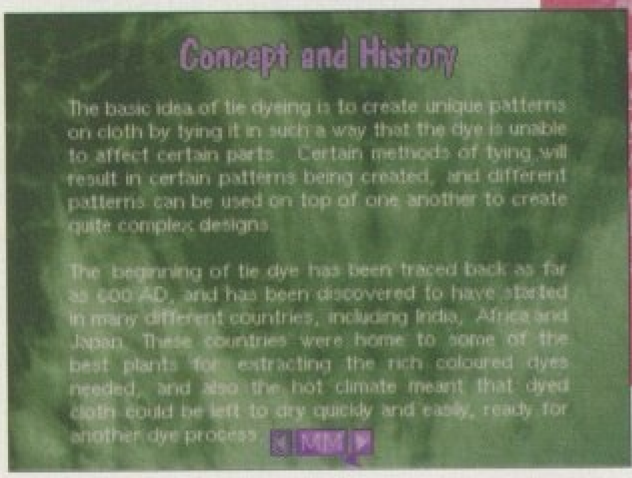
When I finally managed to drag myself away from guiding Rad Belgrade to their third consecutive Yugoslavian domestic double in the latest version of the superb Sensible Soccer and got around to doing some proper work, the usual mixed bag of PD gubbins awaited. This month's selections include some decent games, an example of how Promoware definitely should not be written, and plenty of utilities with which to enhance your Workbench...

How To Tie Dye

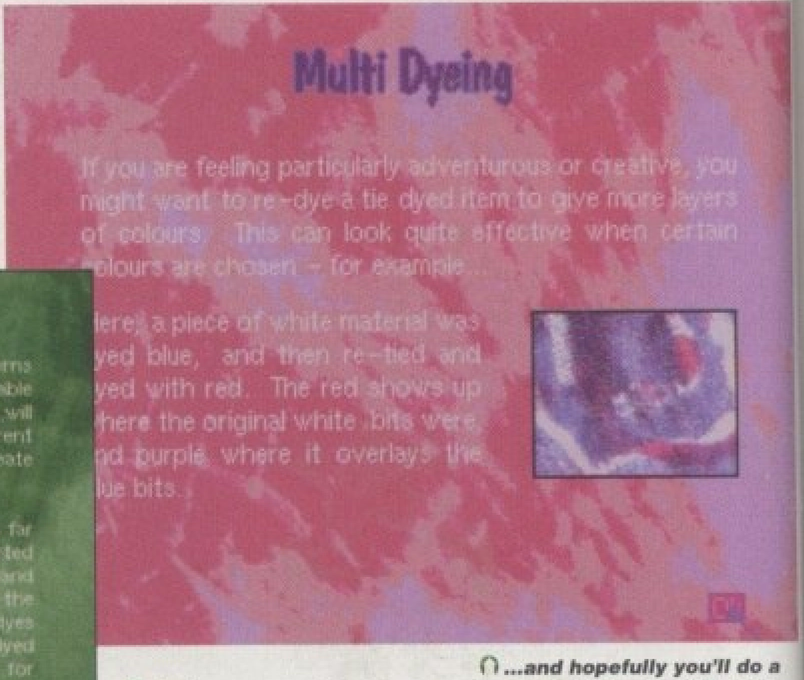
Produced by: Peter Aston
Available from: Roberta Smith DTP

It might not seem to be the most interesting subject on which to base a CanDo presentation but, in actual fact, How To Tie Dye is a readable, informative and absorbing disk. More and more tie-dyed clothes are in evidence these days, and if you fancy having a crack at producing your own, this is an ideal place to start.

The main menu offers information on how to get started, the various techniques which can be employed to produce different colourful effects, and the decisions you'll need to make along the way. As well as simple text (overlaid, of course, on suitably garish backdrops) there are black-and-white digitised pictures and diagrams, some of which can be clicked on to bring up more facts and advice. How To Tie Dye so impressed me, in fact, that for a moment I even toyed with the idea of having a stab at it myself, until the realisation dawned that I'm completely pathetic at that sort of thing. Still, if you're not, then How To Tie Dye is strongly recommended. It comes on two disks and requires at least Workbench 2.



Produce your own top fabric designs..



...and hopefully you'll do a better job than that 'Ren' in Neighbours

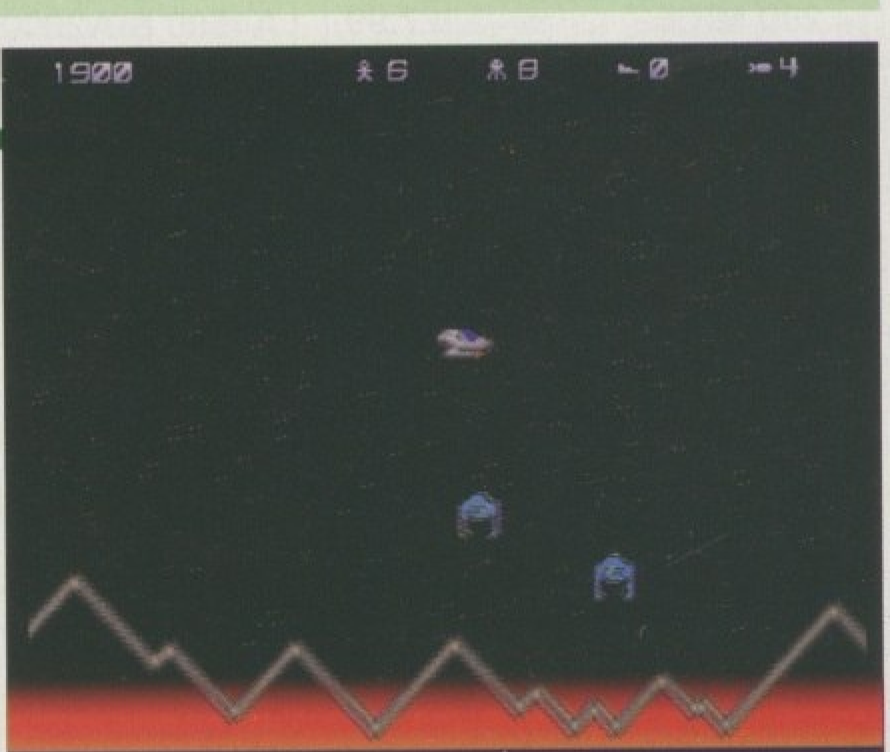
Phantom

Programmed by: Andrew Lunn
Available from: OnLine PD

Scarcely a month goes by without at least one updated version of a golden oldie tumbling gently through the Public Sector postbox. This time, it's the turn of that arcade gem Defender to make a welcome reappearance.

Just in case you've never encountered Defender (admittedly a rather unlikely scenario), the aim is to protect a planet from alien invaders who seek to steal precious canisters of, erm, something or other. Basically, the idea is to shoot the beasties into lots of tiny pieces.

Yes, high speed blasting action is the order of the day, and it's as tough and unforgiving as can be. Simply hurtling through each level blasting frantically won't get you very far, although you'll have to take extra care when carefully combing the planetscape because Phantom doesn't feature the scanner that many such games do. Decent enough graphics and some nice atmospheric music are the icing on the cake. Phantom's a worthy purchase, although since it's shareware you really should send the author a fiver as a registration fee.



They certainly don't make games like they used to

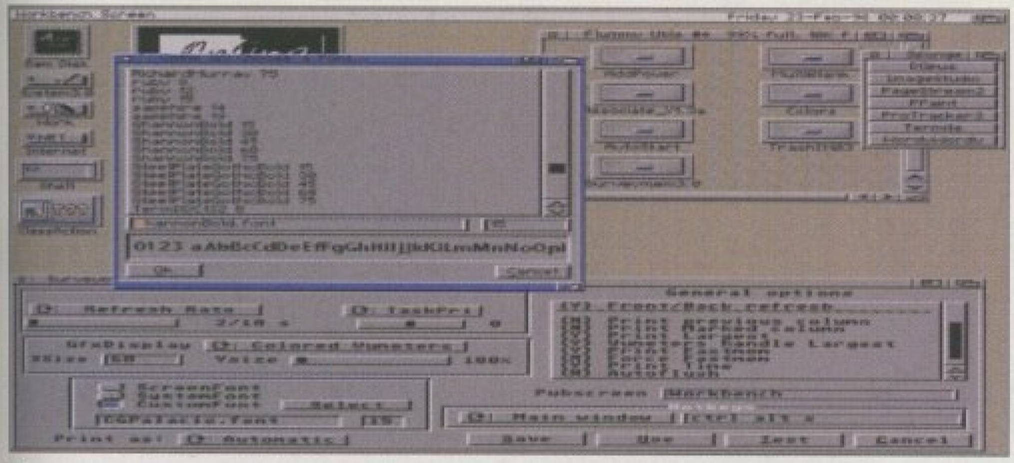
Nobody Like You

I want to hear from you if you have any program, whatever its purpose, which you consider worthy of review. Whether it will be freely distributable public domain, shareware or licenceware, if you feel it's of sufficient quality to merit coverage then stick it in a jiffy bag or padded envelope and send it in with all haste. Although Public Sector receives too many submissions to cover them all, I promise I'll at least look at your work – even if it's yet another Lottery program or Klondike cardset. It does make my job a lot easier though if disks are clearly labelled. Please also include a cover letter detailing the disk contents and price, and giving some basic instructions. The magic address is:

Dave Cusick
PD submissions
Amiga Computing
Media House
Adlington Park
Macclesfield SK10 4NP

FLUMMY UTILS 4

Programmed by: Various
Available from: OnLine PD



Surveymem can be set up to suit your needs using the handy preferences program

This is another interesting collection of utilities. First up, AddPower, is yet another do-it-all commodity. Many of the features found in MultiCX, MCP, YAK and all the others are here too, as well as some novel ideas like automatic centering of workbench windows and minor menu enhancements. It also manages Assigns, CLI Aliases, and so on. It's all nicely done, although to be honest you'll only ever need one of these programs and I'm personally still an MCP fan. If the author Ian Einman continues to develop AddPower, though, that situation could change.

Associate is a handy program for assigning icons to files. Selecting 'Show All Files' then dragging one or more files onto the Associate AppIcon will create icons based on the file type, so, for instance, all picture files could have the same icon and all sound samples another. If the program can't recognise a file type, a requester pops up and asks you to select an icon.

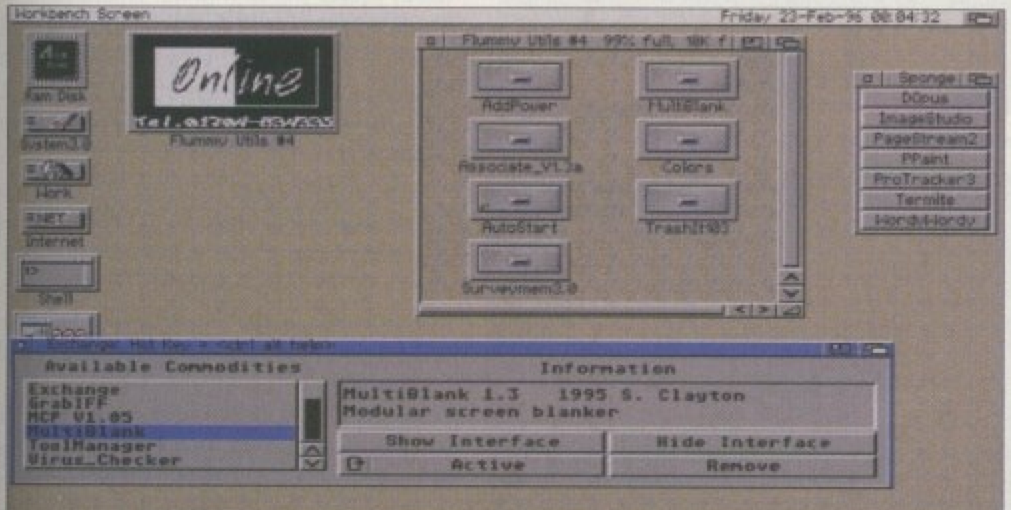
Then there's Autostart, which acts effectively like a more powerful version of Workbench 3.0's WBStartup drawer. Workbench tools, shell commands and scripts, and ARexx scripts can all be started. It's also slightly more versatile than WBStartup because pressing the mouse button allows you to skip the loading of certain programs. With a pleasant interface and some excellent documentation, Autostart is definitely worth a look.

Surveymem is – hurrah! – another memory monitor program. Still, it's a very good one which runs as a commodity, has a highly configurable display, and can be popped onto the frontmost public screen at any time. It also has a groovy graphical memory display.

TrashIcon dumps a trash can on the Workbench screen, and all files dragged onto this AppIcon are deleted. It also rather usefully updates the Workbench window so you can see what's been wiped.

Of course, nothing's perfect: there's a nicely presented screenblanker, Multiblank, which includes all the usual screen savers (starfields, flying toasters, etc), but seems worryingly unstable for a terminate and stay resident program.

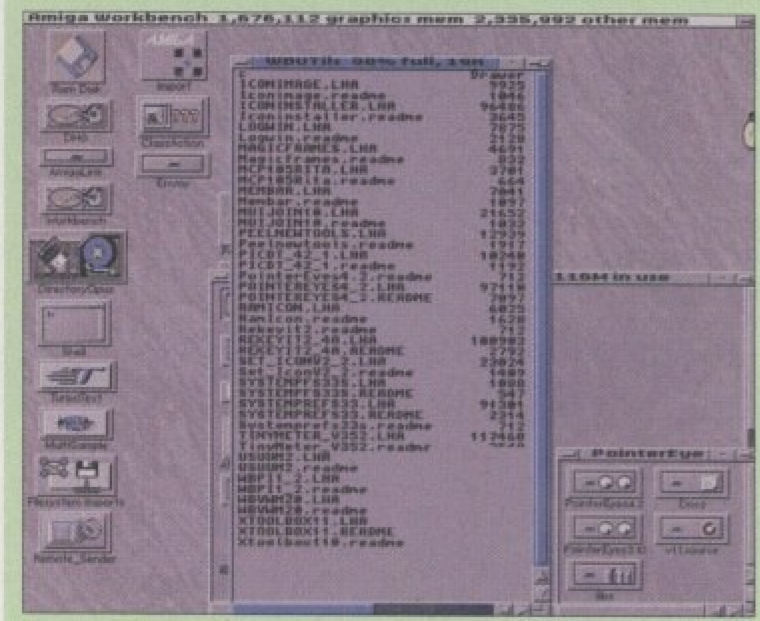
And there is also Colors, which might be marvellous but I haven't the foggiest what it does because the documentation was totally garbled and the program crashed my system. But apart from these two slight disappointments, this is an excellent collection of Workbench utilities.



Configuring Multiblank to use the good old Flying Toasters screen saver

LHA FILES VOL 1

Programmed by: Various
Available from: Roberta Smith DTP
Disk No: AC0343



Useful utilities are waiting to be decompressed on this disk

An Amiga Club International compilation disk consisting of carefully selected Lha archives and their accompanying ReadMe files, this disk attempts to provide a handy workbench utility for everyone.

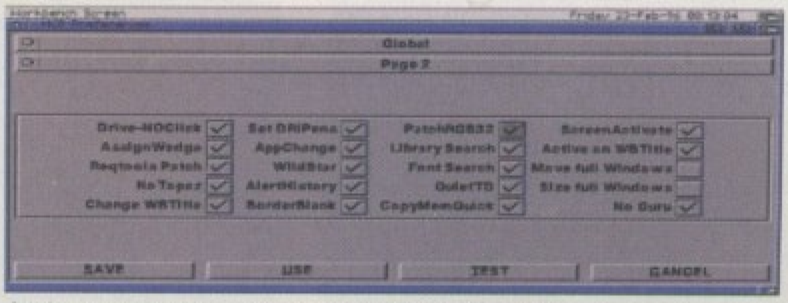
There's IconImage and IconInstaller which, unsurprisingly, allow you to do fancy things with icons. Both have nice drag and drop interfaces and are capable of changing icon images without altering the tooltypes, amongst other handy features. MUI-Join is a file splitting and rejoining program making use of Stefan Stuntz's Magic User Interface. RAMicon allows you to install a nice icon for the RAM Disk, instead of the dull standard floppy disk icon. ReKeyIt allows you to redefine the keyboard shortcuts for Workbench menu functions.

XToolbox creates a little window containing pull-down menus which can include all sorts of programs – a little like Toolmanager, plus a rather attractive 3D interface but minus a friendly configuration program and the more fancy features. Still, it remains probably the most useful archive on the disk.

As ever, there are a couple of little workbench memory monitor programs – useful to programmers, but surely there are enough of these around by now. There are also OS 3.0 datatypes for Windows Icons, and Macpaint, PCX and .BMP picture files, as well as a processor preferences program, and some odd inclusions such as the occasional Swedish or Italian catalog file. Varied then, but scarcely indispensable.

HAUNTED BY YOU

The latest version of the wonderful Master Control Program, complete with numerous bug fixes and little enhancements, is now available. There are separate 68000 and 68020 versions of the all-singing, all-dancing commodity and an the updated preferences program uses MUI, giving it an attractive interface which makes configuring MCP to your tastes a swift and simple task. MCP v1.10 is freeware, and is available from OnLine PD.



My favourite do-it-all commodity, MCP, constantly improving and now at version 1.10

CIRCUS

Programmed by: Graham Mackarel
Available from: Underground PD

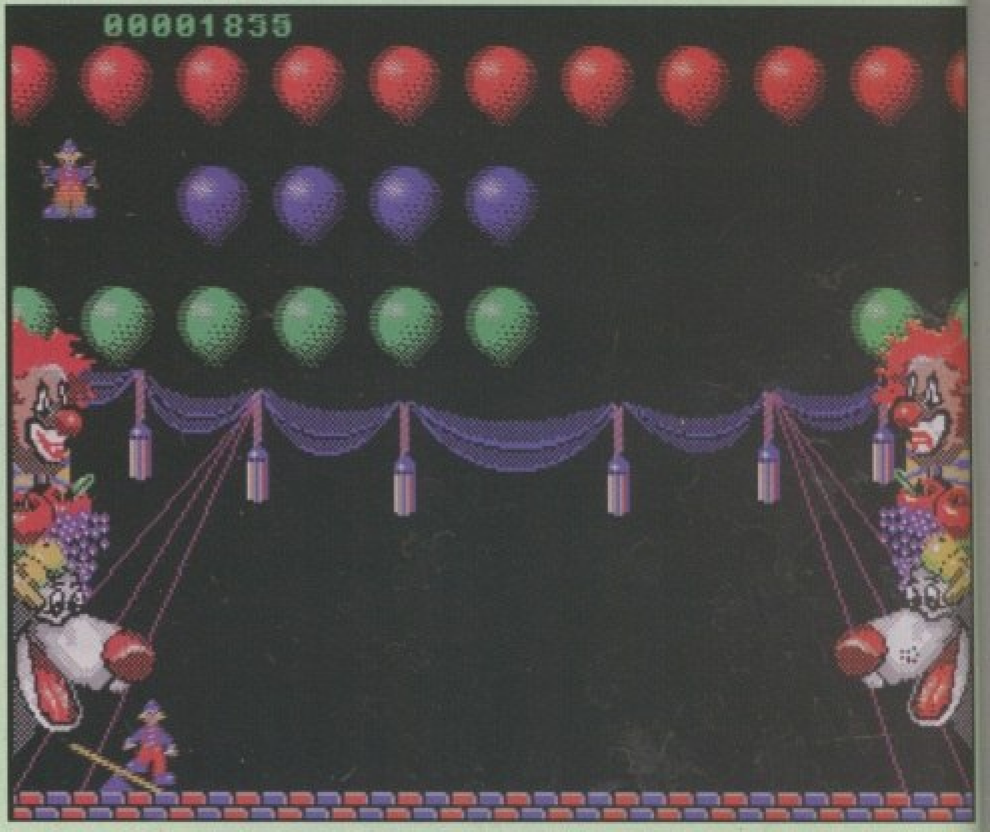
A variation on another classic game of yesteryear, namely Breakout. Here, instead of using a ball to demolish a wall, you use clowns hopping on a seesaw to pop passing balloons.

The game is controlled by mouse and there is a definite knack to making the flying clown land at just the right point on the seesaw to launch the other clown as high as possible into the air.

There are also bonus objects which appear when certain balloons are burst and can be collected to give your clowns special abilities. These include Umbrellas which earn you an extra life and lots of points, Diddy Balloons which allow you to control the flying clown's position with the mouse, and Wings, with which the flying clown can gain extra height.

There's a second game on the disk called Drip, by a bloke called Art Skiles, which bears something of a similarity to Pacman. The objective is to travel around a screenful of pipes, rusting the pipes as you go. Along the way, various enemies will be in pursuit, ranging from ice cubes to electric coils. If they get too close, you can 'drip' yourself down the screen to another pipe.

With 15 levels to negotiate (none of them very easy), Drip presents a long-term challenge. It's been knocking around the Public Domain for some time but as one of two simple but addictive games on this disk, it should provide plenty of entertainment.



Owing a large debt to games like Breakout, Circus packs plenty of playability

ULTIMATUM

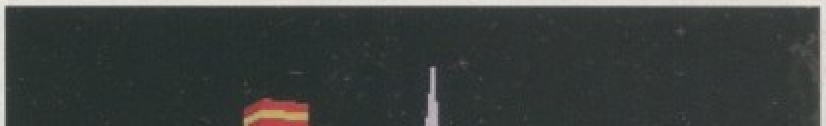
Programmed by: Stuart Matthews
Available from: Underground PD

Classy presentation, atmospheric music, and some flashy introduction screens set the scene beautifully for this futuristic 3D shoot-'em-up.

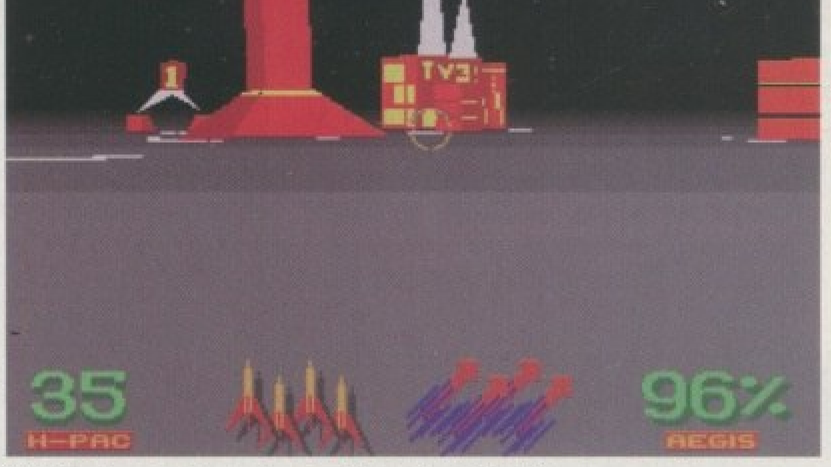
The year is 2030 and crime levels are at an all-time high. A new breed of criminals, the Transgressors, increasingly control every aspect of city life. The law enforcement agencies have poured all their resources into ending the violence but until now, they've struggled to contain it. Now they've come up with a new weapon in the fight against crime: the Vindicators.

You play one such Vindicator, Rick Murphy, whose family has just been wiped out in a cunning strike by the Transgressors. In an effort to gain revenge you have challenged the Transgressor gang members to a series of one-on-one tank duels in special combat arenas.

Ultimatum is an enjoyable blaster, with plenty to challenge even hardened gamers. It's not perfect; there's some irritating disk swapping during loading, although thankfully the game is hard drive installable, and whilst the graphics are colourful, they are functional rather than spectacular. The frame rate isn't stunningly impressive either which can, at times, make keeping track of your enemy's position rather awkward. Still, 3D games frequently suffer graphically due to their complexity, and since Ultimatum was written in AMOS 3D, a lot of these problems aren't really the author's fault. Besides, the most important aspect of any game is the playability and in that respect Ultimatum fares well, making it definitely worth a look. It requires at least an A1200 to run, and is shareware, with the registration fee being fifteen Australian or ten US dollars.



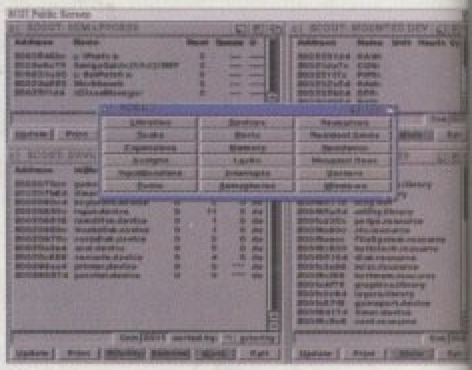
Ultimatum: a shooty game, with tanks and stuff



Die mister Transgressor. Painfully

SCOUT V2.3

Programmed by: Andreas Gelhausen
Available from: OnLine PD



The rather tasty MUI interface of the highly informative Scout

Scout allows you to monitor what's going on inside your Amiga. It can display lists of tasks, resident commands, assigns, ports and so on. You can also mess around quite a bit, freezing tasks or removing interrupts for instance.

The program uses MUI and it's extremely user-friendly as a result. All the information is displayed in neat little windows and operations can be performed at the click of a button. However, if you're not an MUI fan, virtually all of Scout's features can be accessed via the shell.

Scout also has an ARexx port with an impressive range of commands supported by the program. Apparently, it's even possible to use Scout as a TCP/IP service through AmiTCP v4.0 so that your machine is available to other machines in a network.

Whilst the information Scout can provide you with isn't necessarily going to be incredibly exciting, it should be extremely useful to programmers, and control freaks will appreciate the numerous options available.

Pepsi All Over The World

Programmed by: An anonymous German bloke
Available from: Roberta Smith DTP
Disk No: G498

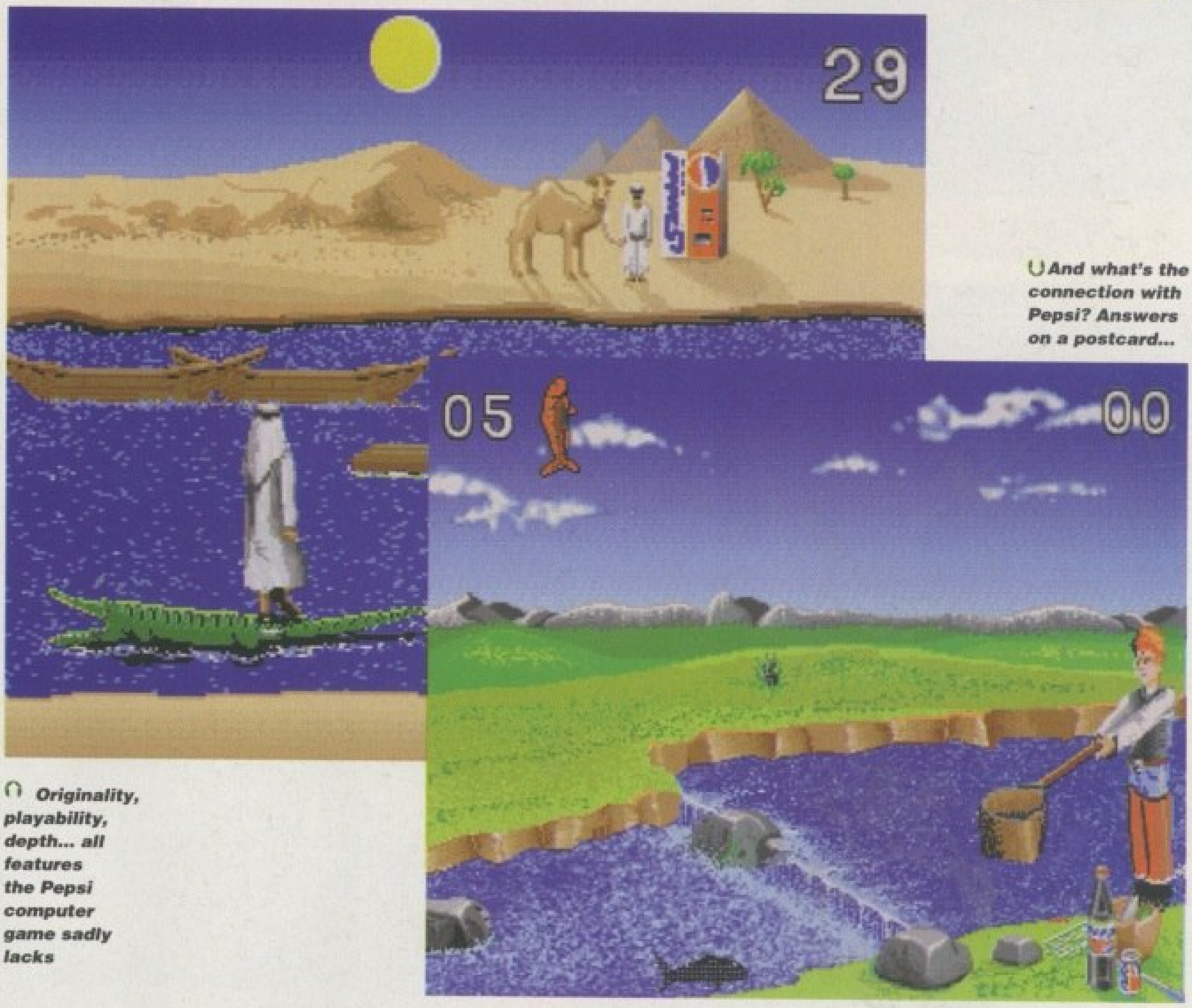
In a bizarre Promoware move equalled only by a rather tragic McDonalds tie-in that's been doing the rounds, Pepsi Cola now features in an Amiga PD game.

Pepsi All Over The World is, in a word, pants. The thing is, it's so laughably poor that it's worth a look.

I might be missing something here because my command of German is not what it used to be, but the game seems to consist of five little subgames set in different countries dotted around the world. In a stunning example of racial stereotyping, each place has its own wacky activity.

In Ireland your task is to collect fish as they swim downstream. In Egypt you must guide a robed chappy across a river in classic frogger style to a Pepsi Can machine on the far bank, and in Alaska (not a country in fact, but there you go...) you must help catch oil dripping from burst pipelines. Quite what any of these weird gamelets have to do with Pepsi Cola is something of a mystery, although the intro screens are plastered with logos and curious caffeine lovers can at least find out how Pepsi is written in Japanese.

The graphics are alright, I suppose, but that doesn't alter the fact that what we have here are five simplistic and hopelessly inadequate examples of what can be achieved by determined people lacking the faintest glimmer of imagination or programming talent. Hysterical.



And what's the connection with Pepsi? Answers on a postcard...

Originality, playability, depth... all features the Pepsi computer game sadly lacks

Roswell Demo AGA

Programmed by: NFA
Available from: OnLine PD

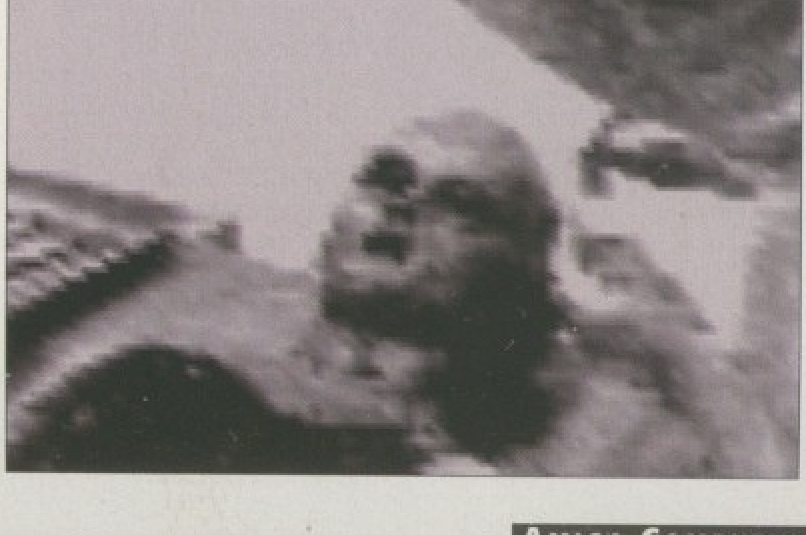
Aliens have been visiting our planet for years. It's true – for years the American government have kept hidden numerous close encounters of the third kind. In fact, they may even have conducted top secret discussions with alien races. If we're to believe certain people, that is.

The problem with believing such conspiracy theories is that they all seem so far fetched, and they are extremely hard to prove. It must be said that the footage of the Roswell incident, which has received much publicity recently and featured in a Channel Four programme last year, has not helped things at all.

Now widely regarded as not being the work of some imaginative con artist, the famous scenes of short, pot-bellied humanoids being studied by curious men in lab coats are laughed at by many. If you've never seen any of the film, or you're just keen to get your hands on your very own twenty seconds of fuzzy black and white computerised footage, then it might be worth getting hold of the Roswell demo.

However, there's a distinct watch it once then consign it to the diskbox type feel about this, so don't expect anything stunning.

Roswell: convincing, isn't it?



Something hot in a cold country

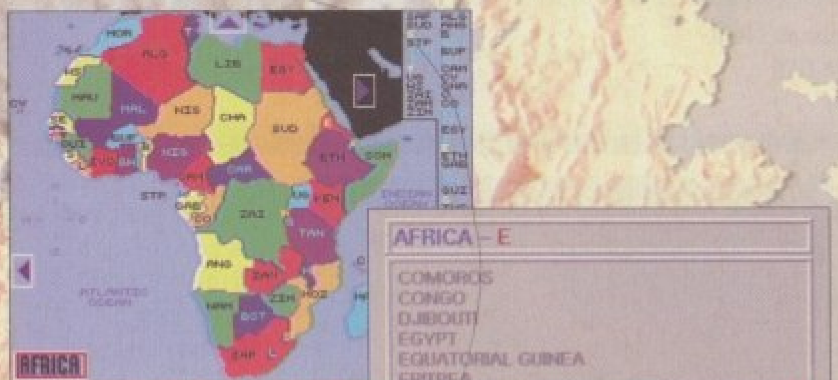
OnLine PD
1 The Cloisters, Halsall Lane, Formby,
Liverpool L37 3PX
Tel: 01704 834335

Underground PD
54 Carmania Close, Shoeburyness, Essex
SS3 9YZ
Tel: 01702 295887

Roberta Smith
190 Falloden Way, Hampstead Garden
Suburb, London NW11 6JE
Tel: 0181-455 1626

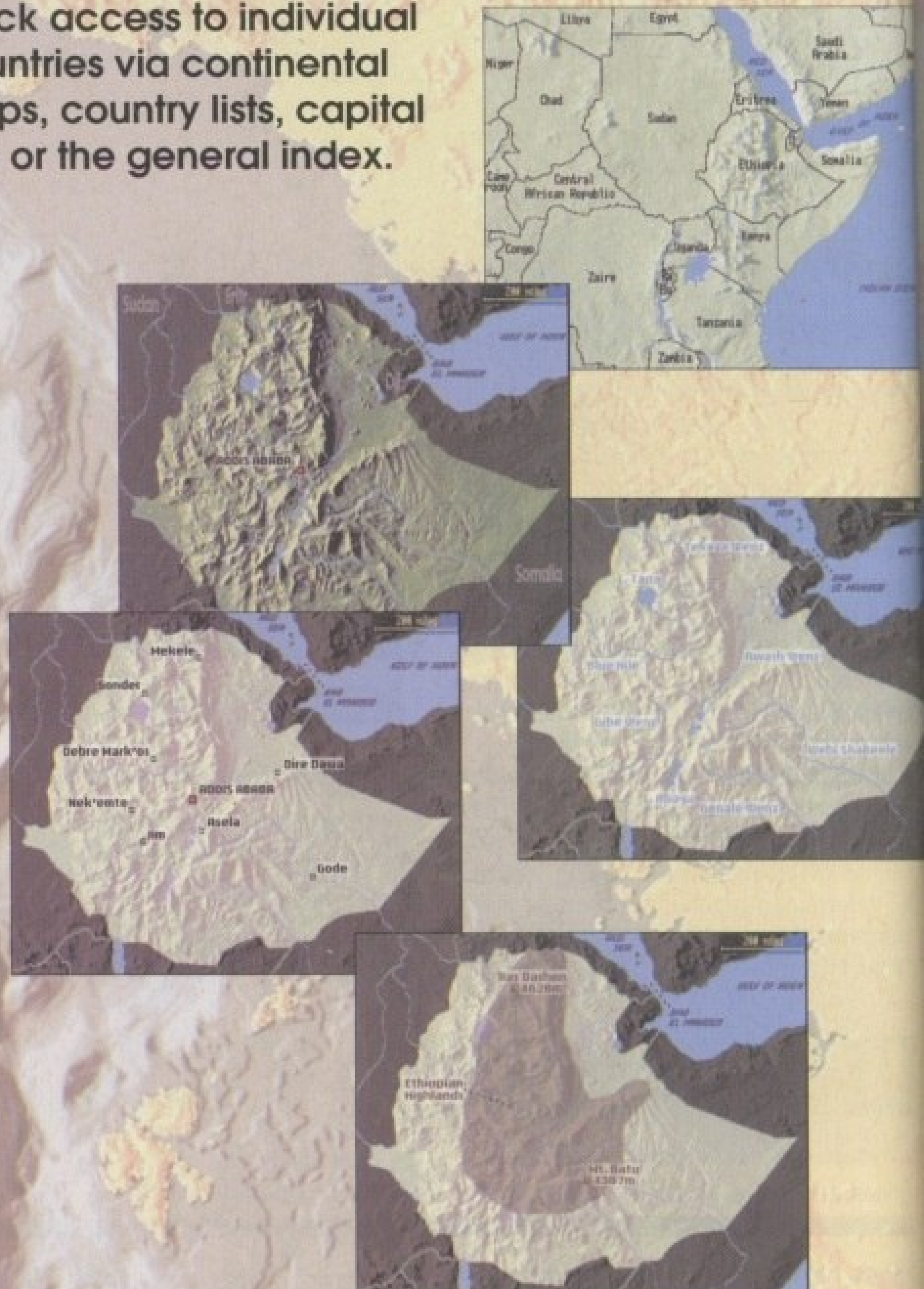
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LITERACY	62%
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Making *waves*

It's good to talk, and the Internet is perfect proof of that. The Internet started off as a military project to create a network that could withstand a nuclear attack, but the reason it grew into such a world wide phenomena is the people using it. The engineers who originally set up the military part found they could chat and send messages to each other, and slowly, as more computer networks join this fledgling Internet, more people gained access and so more people started communicating with each other.

From this the various 'services' that allow different access to the Internet appeared. Mail for direct communication to other people, newsgroups for widespread discussions and debates, IRC for real time chat, FTP for making files publicly available and, most recently, the World Wide Web allowing a much more media rich environment to explore.

Until the surfer pack rears its head the only well supported way any Amiga owner can get onto the Internet is using AmiTCP. From everything I have heard and the number of letters we get through the post, there are many people out there having a lot of problems installing and using AmiTCP. So I have decided to take my life in my hands and install AmiTCP from scratch, in the possibly vain hope that someone else might gain some help from seeing what I did to get it up and running.

Before you can install AmiTCP for your Internet provider you will need to use a standard comms package to dial up your account so you can logon and enter your password. To do this you will need a program such as Term or Ncomm.



INTERNET JARGON

A real problem with the Internet is the amount of jargon it throws up. So before you even think of installing AmiTCP there are a number of very important terms you need to understand that will relate to some very important pieces of information you will have, or should get, from you Internet provider.

The best way to explain is to take a look at what the *Amiga Computing* account looks like. If you want to e-mail us our main e-mail address is edit@acomp.demon.co.uk. This can be split into a number of parts, each of which is given a name:

acomp	node name
demon.co.uk	domain name
acomp.demon.co.uk	host name
edit	mail box alias

acomp is the actual name of our computer in the AC offices. The *edit@* part before the acomp is irrelevant at this stage and is only an alias that allows mail to be directed to different mail boxes. As you may have noticed, there are also ESP and ACAS mail boxes that have the same *host name* of acomp.demon.co.uk, but their mail is directed to their different mail boxes on our office Amiga.

demon.co.uk refers to the administration domain of the network to which your host computer is connected. This is your domain name and usually refers to the Internet provider you are using.

acomp.demon.co.uk is the complete address of your machine and is called the host name. During installation the AmiTCP installer asks you to enter the host name, not including the domain part. If you have understood the above you can see it is asking for your computer's node name which, in our case, is *acomp*.

IP address is the numerical version of a machine's host name. This is made up of four 8-bit numbers separated by dots. *Amiga Computing*'s IP address is 158.152.101.200, and when you use acomp.demon.co.uk this gets translated by your Internet provider to 158.152.101.200 instead. However, as people generally remember names better than numbers, host names are a human friendly alternative to IP address numbers.

When installing AmiTCP you will need to know at least two IP address, which are given to you by your Internet provider. The first is your own computer's IP number which uniquely identifies you from every other computer connected to the Internet, so if someone sends you an e-mail it knows where to go. The other IP address you need is that of your Internet provider's server, the computer you connect to that downloads e-mails and all the other Internet traffic to your machine.

Default gateway is where all the Internet traffic you create is sent, and this machine then, hopefully, sends it whizzing off to the correct destination. Usually this will be the same as your default server's IP address, as it is the same machine. Your Internet provider will supply you with this information.

Name servers are the machines that will redirect your Internet net traffic to the correct destination. Having named servers allows you to use the 'named' version of IP addresses. The named server is used to work out what IP address should be used for anything you send out.

DIALER

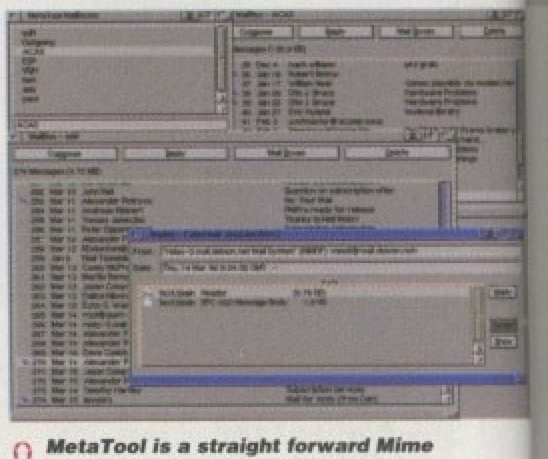
The first brick wall I ran straight into when I first installed AmiTCP was that there is no provided way to actually dial up your Internet provider. Typically, when you first use AmiTCP you have to use a comms package such as Term or NComm to log onto your account, and then start AmiTCP. The problem here is that you then normally have to quit the comms package, and unless you have set up your modem not to drop the carrier it will immediately link down – not very helpful.

To get around this you either have to use one of the many ARexx dialler scripts – a little overwhelming to set up for my liking – or on this month's coverdisk there is a tiny tool called Dialer. This consists of the dialer.device which should be copied into your DEVS drawer, and a text file called dialer0.config that needs to be edited to suit your own needs. You will need to add the correct Baud rate for your modem, your own Internet provider's phone number, and your login name and password. The protocol you will be using will be SLIP, and then you save the file to ENVARC. You should install dialler before installing AmiTCP as you will need to choose the dialer.device part way through installing AmiTCP.



MAIL AND NEWS

This is where things start to become a little more trickier. The Internet started off being run on Unix machines, and the vast number of Internet providers use Unix machines which are very powerful and configurable but are incredibly complex. Unfortunately, a lot of the software for the Amiga has simply been ported over from Unix machines which means you have to create a lot of the files and directories found on Unix machines before you can use these programs.



MetaTool is a straight forward Mime compatible mailer, well worth considering

To receive mail you need to install a SMTPd service to AmiTCP. This stands for Simple Mail Transfer Protocol and was initially used for transferring files from one Unix box to another remote one. It is, however, perfect for mail and news purposes.

People just using the standard AmiTCP installer need to add a few things to make using mail and newsgroup programs much simpler. Firstly, you need to create a number of new directories in your AmiTCP drawer. Create a drawer called *usr* and in this drawer create four more drawers called mail, news, libs and spool. These will be used to store related files. Next you need to edit the Startnet script found in the AmiTCP:Bin drawer. To this you need to add the following lines, but you could, alternatively, add them to your user-startup:

SEARCH ENGINES

http://www.lycos.com – an excellent search engine that provides you with lots of control over the search
http://www.webcrawler.com – one of the early search engines that is still very useful
http://www.yahoo.com – provides the best way to quickly reach popular sites
http://www.altavista.digital.com – Digital has decided it wants a search engine and here it is

DEMON USERS

Demon is one of the largest Internet providers in the UK and provide support, if limited, for Amiga users. This comes in two forms –when you first join they give you a single install disk that will set up AmigaNOS so you can FTP, e-mail and use newsgroups. Unfortunately, as AmigaNOS is not supported by anyone else you are stuck with these original programs and you really do need to upgrade to AmiTCP. Unofficially, Demon provide an AmiTCP installer that gives you major advantages over the original AmiTCP installer. Even though the installer is aimed specifically for Demon users, I would advise anyone who is on the Internet, or is struggling to get AmiTCP to work properly but can ftp, to get this installer.

You need to FTP to ftp.demon.co.uk and go into the /pub/amiga/installer/tcp directory and get the AmiTCP4_DIS95_v3.lha

INSTALLING AMITCP

This is where the fun begins. If you understand what the various parts of your host name are and you have your computer and your Internet provider's IP address, actually installing AmiTCP should not be a problem. With all this information at hand, double-click the AmiTCP installer icon and away you go. I am assuming you are a home user connecting over your phone line using a modem with the normal Amiga serial port to your Internet provider.

For comparison the *Amiga Computing* details are as follows:

user name	edit
node name	acomp
domain name	demon.co.uk
host name	acomp.demon.co.uk
IP address	158.152.101.200
Demon IP address	158.152.1.65

You need to create an AmiTCP drawer, usually on the root of you Work directory, where all the AmiTCP files can live.

update the Sana II devices
install the new fonts, if you want

enter your user name – acomp
login name, anything you want – acomp
proceed past user and group id numbers
enter proper name, anything you want – Amiga Computing

select root directory, why not the AmiTCP drawer
click proceed on shell

add your user, enter password – just hit return to leave this blank
(I am assuming you do not have a dynamic connection so select no)

enter the host name of your computer not including the domain name.
(Our host name is acomp.demon.co.uk, AmiTCP only wants your computers node name so for us this is 'acomp')
enter domain part of your address – ours is 'demon.co.uk'
enter alias, this allows shorter versions when fingering
acomp =
acomp.demon.co.uk

select slip/cslip
select rhslip

enter slip IP address – this is your computer's IP address, ours is 158.152.101.200

enter default gateway IP address – for us demon is 158.152.1.65
skip netmask – not necessary

double check IP addresses

select slip device
(if you have copied the dialer.device select this from the list, otherwise select the serial device)
pick unit 0
choose modem speed – for a fast machine this is up to 57600, otherwise use 19200 or 38400. If you have problems when connecting you may have to reduce this amount.
choose Maximum Transfer Unit (MTU) – your Internet provider should tell you this otherwise stick with the default value of 1006
select hardware handshaking

double check slip configuration

now you would normally re-enter default gateway IP address then enter the IP address of any other name servers that you could connect to, your Internet provider will tell you
enter domain names to search – ours are demon.co.uk, co.uk, and uk

don't bother starting AmiTCP

```
assign >NIL: INet:          AmiTCP:
assign >NIL: usr:           AmiTCP:usr
assign >NIL: uumail:        usr:mail
assign >NIL: uulib:         usr:lib
assign >NIL: uuspool:       usr:spool
assign >NIL: uunews:        usr:news
assign >NIL: etc:           AmiTCP:db

setenv USER                 edit                  (main mail name)
setenv NODENAME             acomp                 (your Node name)
setenv HOSTNAME             acomp.demon.co.uk     (your Host name)
setenv HOST                 acomp.demon.co.uk     (your Host name)
setenv DOMAINNAME           .demon.co.uk          (you Domain name)
setenv REALNAME             Amiga Computing       (your name)
setenv NEWSSERVER           news.demon.co.uk      (your mail server)
```

Next you need to get hold of the AmiTCPsmtpd.lha file from Aminet. Once you have unpacked it, copy the rMail into the AmiTCP bin drawer, and copy the file in.smtpd to the serv drawer. You now need to add this line anywhere in the AmiTCP:db/inetd.conf file.

```
smtp        stream     tcp nowait root amitcp:serv/in.smtpd
```

This will then allow AmiTCP to access this new service, so allowing you to receive new e-mails that will then be placed in the correct mail box in the uumail: directory.

You then need to create a file called *config* in the AmiTCP:usr/lib drawer. You should, of course, replace the entries with your own relevant data.

UserName	edit
RealName	Amiga Computing
NodeName	acomp
HostName	acomp.demon.co.uk
DomainName	demon.co.uk
Organization	amigacomp
TimeZone	GMT
DefaultNode	gate.demon.co.uk (change to your default server)
NNTPServer	news.demon.co.uk (change to your news server)
RMail	amitcp:bin/rmail

Once these files have been setup you will be able to receive e-mails and news from newsgroups. You should be able to use most mail programs straight off as many use these directories and variables as standard. Metatool would be a good starting choice.

The big advantage for Demon users, or if you decide to use the Demon installer, is that all these files are already set up for you, therefore saving you an awful lot of time. Also, the installer program is far more straightforward and uses plain English to describe what information you are meant to enter next. All in all it took me two days to get AmiTCP up and running, after which I could safely use AmFTP, AmIRC and iBrowse. It then took a further day to work out why Newsgroups were not working.

archive. For Demon users the installation will set everything up perfectly so you will be able to use e-mail and newsgroups along with all the other normal services.

Non-Demon users will have to alter a number of files to make sure everything is set up correctly. Unfortunately, there is not enough room to specify exactly what you have to change, but you should use a text editor to check the entries in the following files:

AmiTCP:bin/startnet – sets up lots of important variable
AmiTCP:bin/link – change mail server address, remove the db/linkmacro line, do this anyway
AmiTCP:db/resolv.conf – change name server IP address to your own
AmiTCP:usr/lib/config – change default and news servers to your own

The advantage of using the Demon installer is that it sets up e-mail retrieval and sending that you will otherwise have to do by hand, and this is easier said than done. Included with the Demon installer is a very nice mail kicker that handles e-mail and does not seem to be available any where else.

select add to user-startup
select start iNetd

reboot

Now, theoretically, if you open a shell and type Startnet, AmiTCP will startup, dial your Internet provider, and you should then be on-line. If you have made any mistakes during installation this is where they will show up.

If the dial script fails to connect you to the Internet provider then check it is dialling the correct number. If it is connecting and then failing, check you have entered the correct baud rate for your modem – it could be too fast – or perhaps you have entered the wrong login name or password.

If you manage to successfully connect to your Internet provider, the only main reason for things not working at this stage is that you may have entered the wrong IP address of either your own machine, the default server address, or possibly of the other named servers. You should carefully check the Aminet:bin/Startnet file, and also the Aminet: db/resolv.conf file.

The easiest way to check if everything is working correctly is to use the Ping and Finger commands. These allow you to find out a number of things. Ping is used to show you how fast a connection you have to another site, while if you Finger another person you can find out more about them – just like in real life. You Ping sites and Finger users, so you could trying pinging *src.doc.ic.ac.uk* and fingering *wizards@doc.ic.ac.uk* to see if you are connected – no response is a bad sign.

Once everything is up and running the first thing you want to do is get yourself a decent FTP client program. The shell based one that comes with AmiTCP is called ncftp and is very good as far as any shell program can be, but if you have a GUI you want to use GUI programs.

Currently, in my opinion, the best FTP program is AmFTP, and to get this you will need to ftp to one of the Aminet sites. For UK users, src.doc.ic.ac.uk is the best site to go for, and US users should try ftp.netnet.net. To ftp open a shell type the following:

```
ncftp
open -a src.doc.ic.ac.uk
cd aminet/comm/tcp
get AmFTP153.lha ram:AmFTP.lha
get AmIRC10.lha ram:AmIRC.lha
```

If you do not have MUI, you will find it on this month's coverdisk, and you will need to get this as well:

```
cd aminet/dev/gui
get mui33usr.lha <destination file>

exit
```

Once you have all of these you can type *StopNet* to link down. Extract the archives and install AmFTP and AmIRC to your AmiTCP directory, or wherever you wish. You will also need to install MUI at this point as well, if you do not have it already. If you have ToolManager you may want to create a new AmiTCP dock, with StartNet, StopNet, AmFTP and AmIRC set up to run from it. This will remove the need for you to use the shell quite so much.

If you now want to get hold of a Web browser, link back up and start AmFTP. In AmFTP, add a new ftp server called Omnipresence and use this address, ftp.omnipresence.com, and you can add the directory /pub/amiga/ibrowse. Once you are connected you should download the latest version of the iBrowse demo. Extract this archive and drag the drawer into your AmiTCP drawer.

You can now start Web browsing straight away by double-clicking on the iBrowse icon. You now have working FTP, IRC and Web browsing programs.

WEB SURFING

Currently, the part of the Internet that has the highest profile is the World Wide Web. As it is the most recent addition to the Internet it has taken advantage of faster network connections and more powerful computers by having a much more media rich environment, allowing Web pages to be splattered with graphics and text. Introduced back in 1990 by CERN scientists who wanted a better way to share information between themselves, the number of Web sites out there has exploded, with now literally millions and millions of pages covering every aspect of human behaviour for you to look at.

The Web works by using a special language that is used to 'describe' how a Web page should look. Your Web browser reads this description and does its best to produce the page. This language is called HTML, or Hyper Text Markup Language. When this was first invented by the people at CERN it was very basic, allowing simple textual links between pages and basic positioning of images on these pages.

HTML is now in its third revision, with many of the new commands being introduced by the now very rich NetScape people. More recent versions of the language allow better text and graphic formatting, and all manner of gadgets can be added to pages allowing users to interact with Web pages. The latest version of HTML allows complex tables to be defined, giving Web designers even greater flexibility in how their pages should appear. The latest addition to HTML are frames which allow you to add mini Web pages that act like menus to the main Web page display, giving the user short cuts to the various parts of your Web site. Unfortunately, no Amiga Web browser supports frames but they are not too far behind.



Currently available for Amiga Web browsing is AMosaic and the much superior iBrowse. Both are available via anonymous FTP from ftp.omnipresence.com in the pub/amiga directory. iBrowse is planned to be a commercial browser and only demo versions of it are available for you to use – these will normally stop working after 30 days of use. This will then leave you with only AMosaic to play with, which is a great deal slower and is not as stable in use.

LOOKING GOOD

Things are looking up on the Amiga Web browser side of things as, currently, I know of 10 projects. Along with AMosaic, iBrowse and Mind Walker all of which are MUI-based browsers, there is AWeb, Hyperion, Juggler, Step 4, Web Link, ALynx and P'Jami. The last is the most interesting of the lot as it is actually part of a larger project involved with port Sun Systems Java object-oriented programming language for the Amiga.

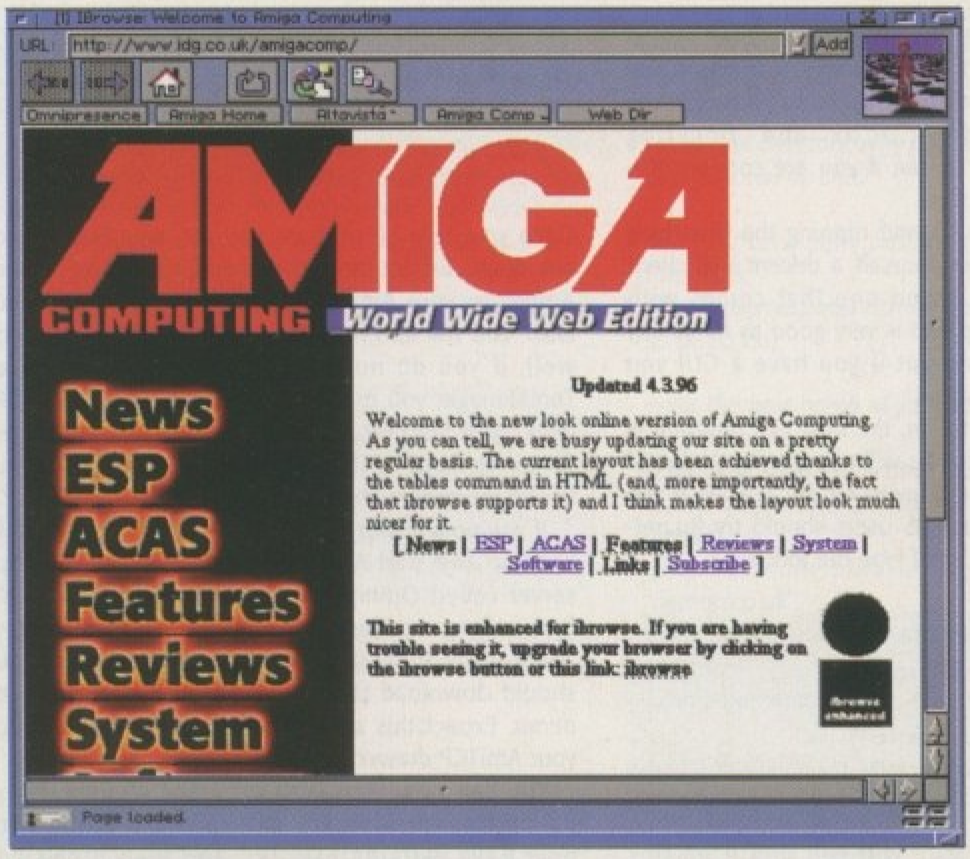
The biggest problem with the Web is trying to find pages that are of interest to you. This is where search engines come in which are sites where catalogues of almost every Web site are held. Through forms you can search for keywords, such as Amiga. After a short wait the search engine will create a set of new Web pages with lists of relevant, or not so relevant, links. Generally, you hope to find a link to someone's home page that is dedicated to whatever subject you were looking for.

One of the best general interest sites is Yahoo which gathers and maintains a large collection of the most recent and up-to-date sites, organised into relevant sections. So if you want to find a site about the comedy show Friends you go to the Entertainment/TV section. From there you can either search the entire TV section or go through the shows, comedies, friends links and you will find a very large list of Friends links, many of which seem to sport lots of Courteney Cox pictures.

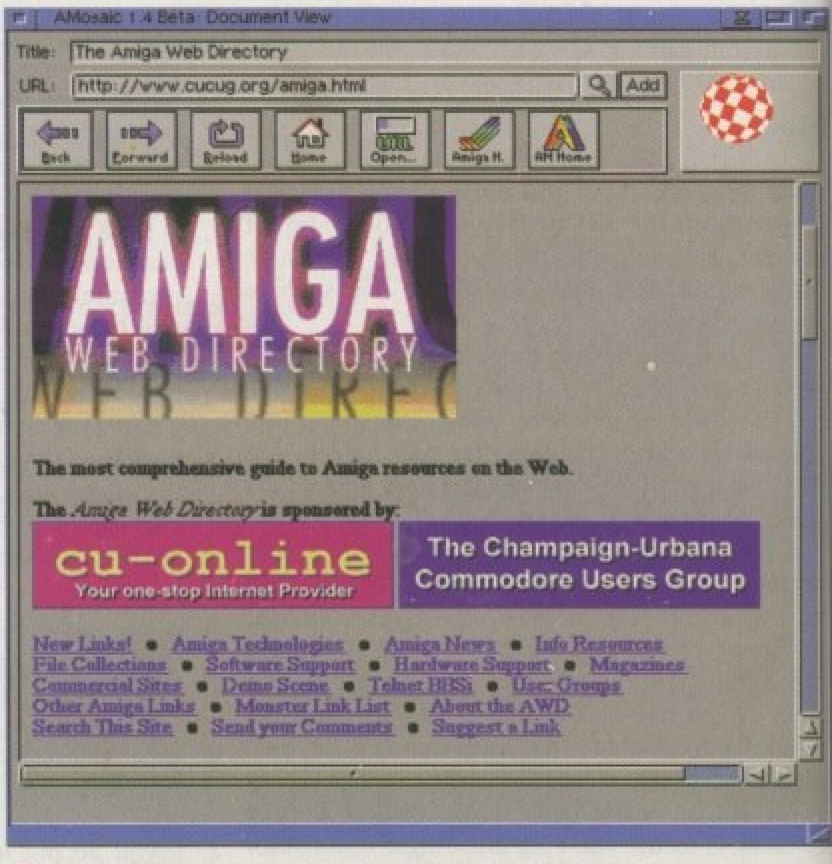
The Web is a great place to find out all sorts of information, and as the contents of the World Wide Web is just a reflection of the type of people who place home pages on it, you are bound to find something of interest.

AMIGA SITES

http://www.amiga.de – home of Amiga Technologies, first place to get any new news
http://www.cucug.org/amiga.html – home of the Web directory. *The* place to find new Amiga links
http://www.omnipresence.com/amiga/ – the original Amiga home page, home of iBrowse and AMosaic
http://www.bangor.ac.uk/~eeu013/walker.html – want to see the new Amiga, find out all about it here
http://www.idg.co.uk/amigacomp/ – it's our home page, due to a bug in iBrowse 4a you need to turn off the internal image decoder



Currently king of Amiga Web browsers, iBrowse can even give NetScape a run for its money speed wise



At best AMosaic is usable, it does the job but the lack of any updates has left AMosaic seemingly stuck in the development quagmire

FTPing

The quickest way of getting hold of files on the Internet is through FTP which stands for File Transfer Protocol and allows you to access remote computers as if they were a drive on your own computer using what is known as a FTP client.

When you connect to FTP sites most of them will require that you login – normally you will be doing what is known as anonymously FTP'ing. This requires that you login with the name 'anonymous' – and if you forget how to spell anonymous many places will also accept ftp – then for your password you enter your e-mail address. Luckily, many of the new FTP clients can do this logging on process for you automatically which makes linking up to a FTP site that much faster – AmFTP and ncftp included.

It is more than likely that the first FTP program you use is a Shell-based one that comes with AmiTCP, called ncftp. As far as Shell ftp programs go it is very good, but you will quickly want to get hold of a GUI-based program. Currently, AmFTP is probably the best available one for the Amiga, but you will need MUI to use it. A good none MUI alternative is GUI-FTP which uses normal Amiga gadgets.

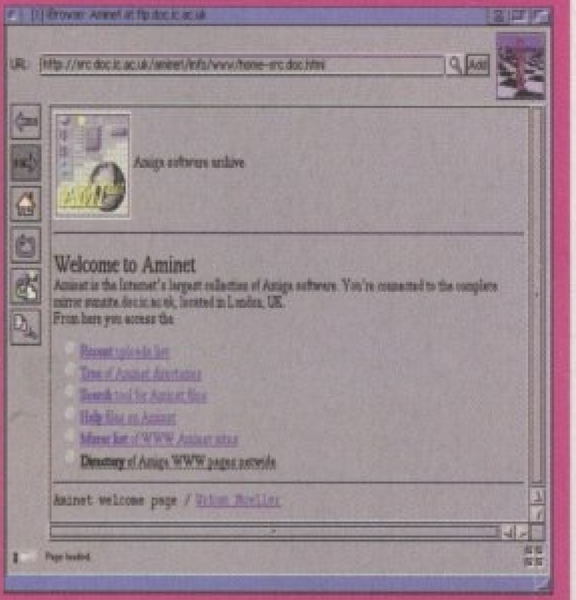
One of the major uses of an FTP client for the Amiga user is to access Aminet sites. Aminet was set up a good number of years ago, being run on an A3000, and was quickly transferred to a University site. The main site is now run from Wuarchive in America, and holds a ridiculously large amount of Amiga-related tools, utilities, pictures, modules, reviews and magazines. Current Internet goers may have noticed recently that Wuarchive has actually not being working properly because they had a major hard drive crash and lost a lot of files. However, Aminet is now up and running correctly.

MAJOR AMINET SITES

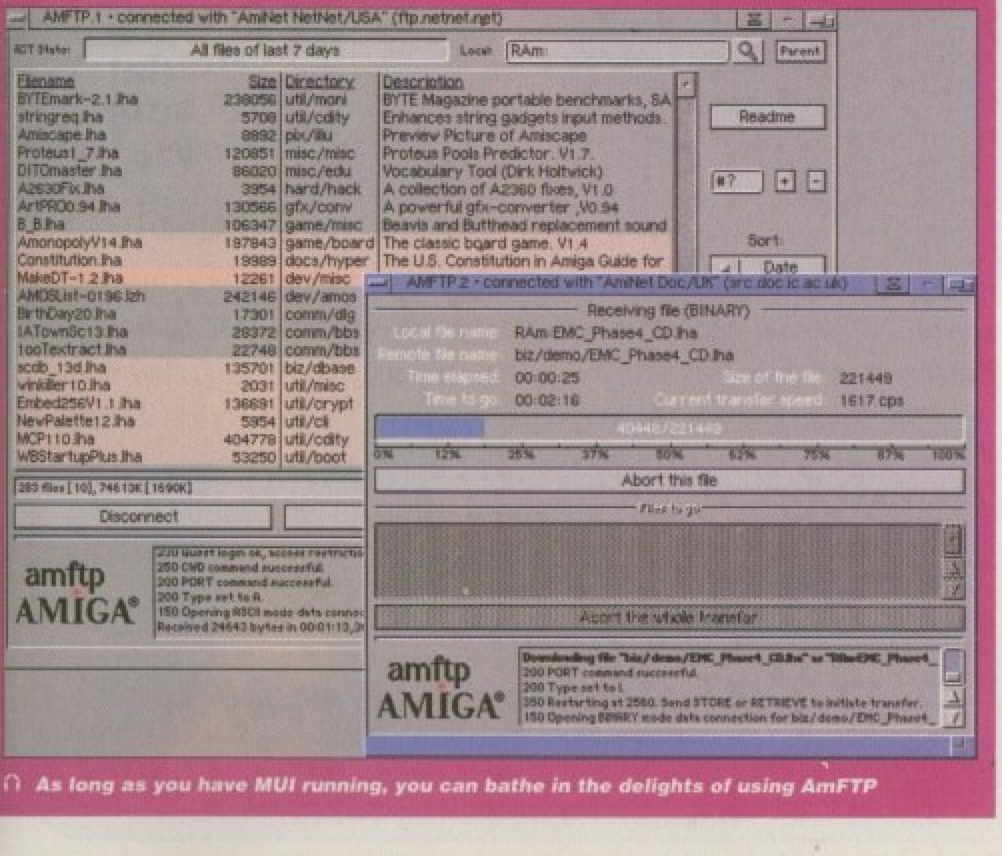
src.doc.ic.ac.uk
ftp.netnet.net
wuarchive.wustl.edu
ftp.germany.aminet.org
ftp.uni-paderborn.de
ftp.livewire.com.au

AmFTP & AmIRC support site

wade1.ab.umd.edu



The best place to get the latest Amiga programs is Aminet



As long as you have MUI running, you can bathe in the delights of using AmFTP

IRCing

IRC is a very buoyant part of the Internet because it allows people to talk to each other 'live', as it were, no matter where they are. As with FTP, to use IRC you need an IRC client, and from this you link to your particular IRC server. Once on you can choose to join one of the thousands of different chat groups that are known as channels.

Before you can get on IRC you have to give yourself a unique nick-name that everyone on the channel can refer to you by. It does not particularly matter what it is, but if you join a channel regularly you will start to recognise other regular users through their own nick names.

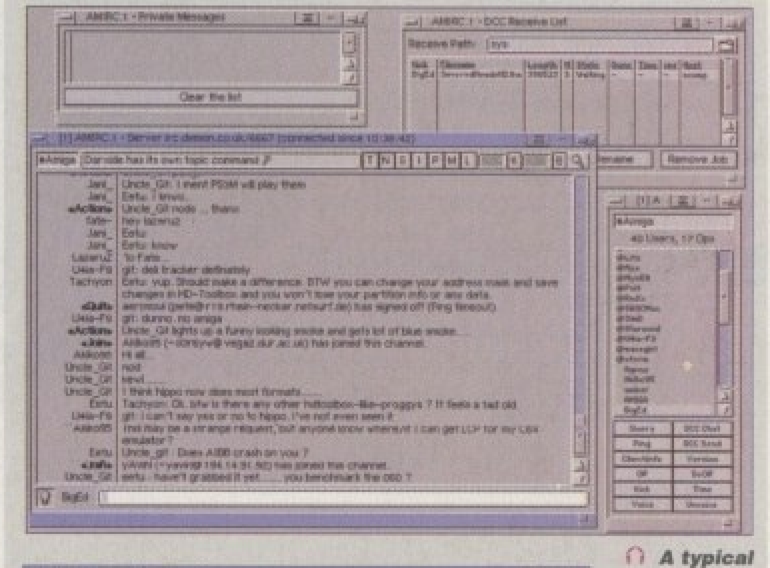
All the chat channels on IRC start with # and the standard Amiga channel is, surprise surprise, #Amiga. All IRC commands start with / so to join the Amiga channel you type */join #Amiga*. Once you have joined, if you want to say anything just type away and every time you hit return everyone can read what you have just said.

On IRC you are not just restricted to plain old public chat, you can talk direct to other IRCers either using the /msg <nick name> command, or can even use DCC chat if you want a more secure direct link. It is also possible to send files between people using DCC send, but if the recipient is on the other side of the world do not expect the transfer to be too speedy.

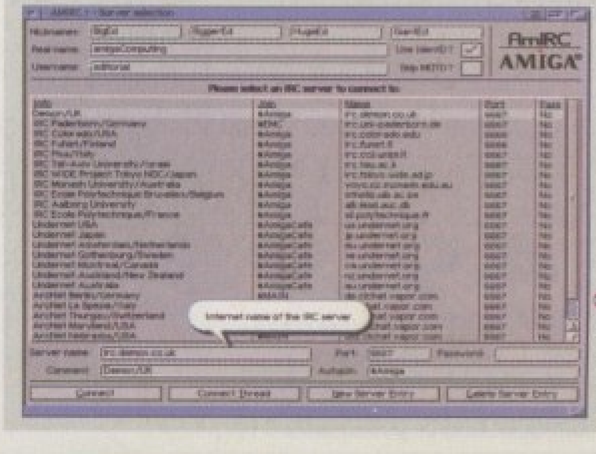
A constant pain for IRCers are net splits, and when one happens certain users seem to 'disappear' from the current channel. Depending where you are in relation to the net split, only a couple of people may be lost from the channel or virtually everyone can appear to go. Net splits are just a side effect of how the Internet is put together and some days can be worse than others – you just have to put up with them. AmIRC is good because it can tell you which people have been lost to a net split, so if you were talking to someone at least you know why they have just left.

There is little IRC etiquette needed, but generally it is more a matter of common sense, like not going onto the Amiga channel and continuously saying how great PCs are and how rubbish Amigas are because you will simply get kicked off by one of the channel ops. Channel ops are users with more privileges than normal which allows them to kick people off the current channel and even put a permanent ban on them.

Another use for IRC is that you can create new channels whenever you like by joining a non-existent channel. This allows specially organised conferences to be arranged, or you could just create one to have a private chat with someone else.



A typical Amiga IRC session



AmIRC allows you to have lots of IRC servers listed

LITE Fantastic

Usually not too keen to have his **vital** parts removed, **Neil Mohr** sees if Final Writer lite has **suffered** at all

The 'lite' phenomenon has hit the SoftWood camp. Not to be out done by Digita, SoftWood have seen fit to release a cut-down version of their top selling page publisher, Final Writer 4. The Amiga has always been sold as a complete low-cost computer system, and as such there are many people who have Amigas but do not have the funds to expand the machine past the basic specification.

Due to the competition between Final Writer and Wordworth, both programs have seen many new features added, so the resources needed to run them has grown along with the programs. This has reached the point where a basic A1200 is not enough, so a cut-down version of the original program is a superb idea because owners of unexpanded A1200s can still use these excellent programs.

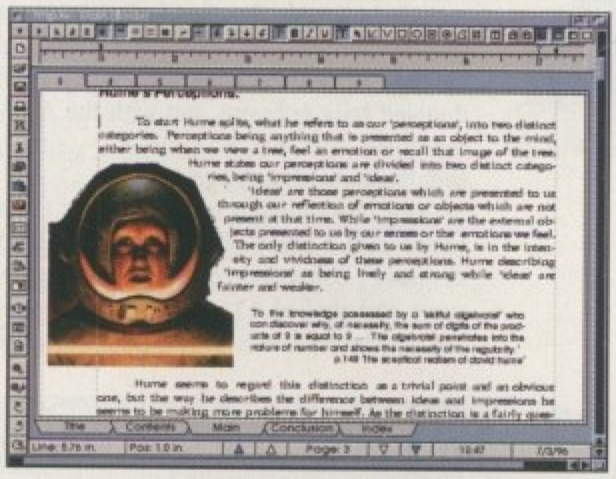
IMPORTANT FEATURES

Final Writer *lite* is basically the same as the original program, but with the most important features remaining. This is not as bad as it may sound because virtually all the original features make it into the lite version intact. You get all the recent changes to Final Writer 4's interface, including the addition of the click tabs that allowed all the menus to be reorganised into a much clearer order, with all the preference options being moved into their own specific requesters. The click tabs are also used in the main window to allow you to quickly jump between different pages and document sections, making document navigation much quicker.

The omissions that have been made are kept to a minimum. The first two, and probably the ones you would expect, are the grammar checker and all the ARexx functions. Leaving out the grammar checker is not much of a surprise as it is very large – over a megabyte – and the ARexx port is probably used by only a small percentage of users, so no great loss there.

Type and spell has gone, even though the normal Collins dictionary and thesaurus remain untouched. It is also impossible now to import EPS images. The postscript library used to handle the EPS images was large, and displaying EPS images is quite processor intensive so this is understandable. If you have EPS images this is quite a disadvantage as there are not too many programs that will allow you to convert an EPS to an IFF image, which is the only format Final Writer will import.

One thing you do lose that is not part of the program as such is all the extra fonts and clipart you get with the full version of Final Writer. This will limit you to the supplied three fonts, even though you can use any Compugraphic or Postscript fonts you have yourself.



There is nothing stopping you creating good looking documents even in this lite version

Out of all the omissions I would find the loss of the group function the most annoying. If you want to create any diagrams in Final Writer this is used a lot to collect objects together to allow you to treat them as a single image. It makes it quite easy to quickly knock up complex diagrams that you can then resize and place in your documents. The loss of the group function also means that if you import a Final Writer document that has grouped objects, the lite version will simply treat it as a single graphic object, so you will be unable to modify this except for being able to resize it.

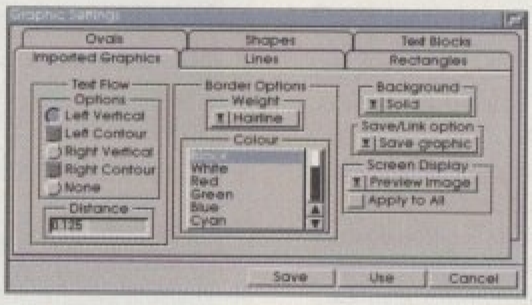
For the money you are paying, Final Writer lite is superb value. The features that have been removed are not essential – practically speaking, the only two that could cause you problems are the loss of the group functions and the inability to import EPS graphics, but if you are only planning to do letters, faxes or straightforward essays the functions that remain are more than enough. All Final Writer's text formatting functions remain untouched, and as long as you don't want to do any fancy diagrams with the structured drawing tools, you will be able to use all Final Writer's drawing tools to the full.

For people with a limited budget who need a page processor that will work on a low specification machine, Final Writer lite provides everything you need.

GRAPHIC OBJECTS

Anything in Final Writer that is not text is treated as a graphic object. One thing that makes Final Writer so easy to use is that whatever type of object you are manipulating, you always use the same functions on every one.

Once an object has been created you can move, resize, rotate, cut, copy, paste and add text flow to any graphic object. The outline to these objects can be changed, and for precise positioning you can enter co-ordinates directly.



Even in the lite version, Final Writer's graphic abilities are very impressive

Bottom line

REQUIREMENTS

RED *essential* **BLACK** *recommended*

2 Mb RAM
2.04+ Workbench
4 Mb RAM
'020 Processor
3 Mb hard disk space

PRODUCT DETAILS

Product	Final Writer Lite
Supplier	Gordon Harwood
Price	£39.95
Tel	01773 521606

SCORES

Ease of use	93%
Implementation	82%
Value For Money	96%
Overall	86%



Habit forming

Ben Vost examines MacroForm and changes his status from **amateur** to professional LightWave modeller

It might seem like a pretty heavy-handed standfirst for this review, but the truth of the matter is that, notwithstanding its shortcomings (more on which later), MacroForm is one of those tools that turns your stumbling attempts with the modeller into stone in an expert sculptors' hands. But unlike a sculptor's stone, MacroForm gives you the chance to rectify and refine your mistakes until you get the result you were looking for.

It does this through a method called 'apply modes'. These use control curves in one layer to affect your polygons (in another layer), but the great thing is that if that curve is just too tight for your polygons, or if it doesn't fit your requirements properly, all you have to do is reform the curve into the shape you want and then hit apply once more. This will reform your polygons around the new curve's shape ad infinitum, and if you decide that you didn't want to deform your polygons after all, you always have the reset command to bring everything back to its starting point.

The best thing about this constant mutation of your curve is the fact that you can save off its results and carry on going. The hair on the model I have created for this review is an example of this. I started with a triangular polygon which I extruded. Then, using the RailBend tool I bent the control curve until I was happy with the shape of it and then applied it to the extruded triangles. The first few attempts at this resulted in curves that were too sharp for the extrusion to cope with, resulting in doubled back polygons, but with the Apply mode set, this was no problem – simply shift the curve and try again.

Once I had a bendy set of polygons I was happy with, I saved off the resulting object as 'Hair1', continued to reform the control curve and applied it to the polygons resulting in different bends to the hair. The more astute of you will already be thinking that this tool is ideal for making morph targets and you wouldn't be wrong. Best of all is the fact that RailBend is only one of 12 similar tools, all of which use a curve as a control surface.

It will take time to learn to use MacroForm to its full advantage, but what a tool. Even with the shortcomings mentioned, this piece of software drags LightWave's Modeler kicking and screaming into the late '90s.

AMIGA BLUE CHIP AWARD

Something's rotten in the state of Denmark...

While I have painted a very rosy picture of MacroForm, all is not well if you try to use it under the following conditions:

Firstly, MacroForm is really designed for LightWave 3.5. It works partially with version 3.1 for any of you with an un-upgraded Toaster4000, but any functions which require the hiding of polygons will fail owing to the fact that this version of LightWave cannot hide polygons. Users of the new LightWave 4.0a will also be disappointed in varying amounts depending on whether they can get MacroForm to work. I had no joy, but OAO Media tell me they have users successfully using MacroForm with 4.

However, owing to a bug in Modeler, ARexx macros run anywhere between five and twenty times slower than they do in 3.5, a problem NewTek have been informed of and are trying to do something about. OAO Media are themselves working on a plug-in version of Macroform which will circumvent these problems and will be available as an upgrade for registered users of MacroForm.

Secondly, those of you with a need for speed are going to be very disappointed because the ARexx compiler that has been used for MacroForm chokes on '060s. This problem should also be resolved once MacroForm becomes a plug-in. I still believe MacroForm to be worth the money, even if you have to switch back to 030 mode to use it.

Those RailToolz in full



This is the main interface for the RailToolz environment, siiting by default on F7

RailBend – this tool allows you to use a curve to bend your polygons to fit it. You can bend your polygons in two dimensions or three, giving the maximum possible flexibility. With Align mode turned on, you don't even have to worry about lining up your polygon correctly for the curves, as RailToolz will do that too.

SmartRail – this is the first of the extrude functions that RailToolz provides. Like RailBend it can automatically match your polygon to the curve. You can specify whether you want to centre the polygon on the curve or let it extrude with an offset. Either way, you won't end up with the dreaded squished box syndrome. SmartRail will even create a circular or rectangular polygon to extrude for those modellers too lazy to even do this.

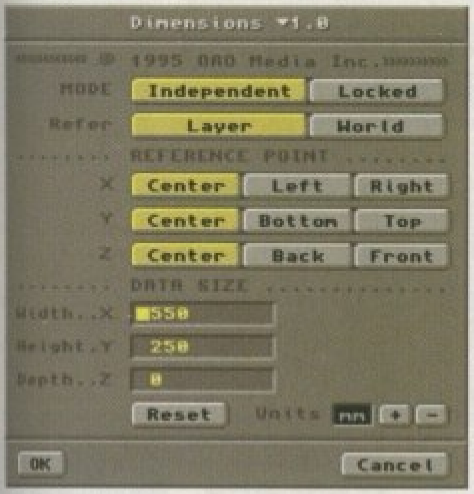
RailForm – this bungs a curve around your model which you can deform. Depending on what settings you choose, your model is then made to fit this curve. This tool is great

OTHER MACROFORM MACROS



The plus and minus signs indicate centering your object on one side or the other of the axis

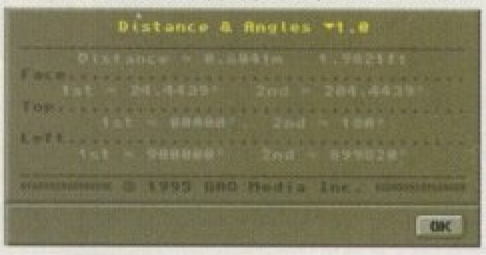
In addition to the celebrated RailToolz set of macros, MacroForm also comes with six other macros, and the tutorials macro which makes use of all the macros by showing you how to use them. The first, KeyMaster, is a bit like the configure keys tool in the Macro or Custom menu in Modeler, with the added benefit of



Dimensions can scale your data to other data, or just a fixed size

being able to load and save different configurations. Align & Center takes the Center1D and Center macros one step further by allowing the user to centre models based on the layout of models in a background layer, or simply on the axis of your choice. You can also arrange data so that the left edge of your model is aligned to the right edge of another model, etc. and even resize data to match.

Dimensions is very powerful and allows you to rescale a set of objects according to the scale of another set. The example given in the tutorial relating to this macro has a house model in the background and a table with a lamp and ruler on it in the foreground, all of which are grossly out of scale with the house. Because you know the ruler has to be a foot long, it means you can scale the other data in the layer accordingly and thus table, lamp and ruler are all scaled appropriately for the house.



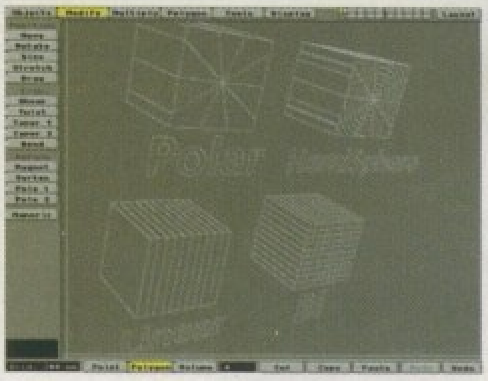
A real boon for modellers used to working in CAD programs, Distances & Angles tells you all you need to know about any two points on the same layer

Distance & Angles gives you the very handy ability to tell the exact distance in all three dimensions, and the angle, between two points. If you only have one point selected, then the distance and angle displayed is that between the point and the origin.

Slice & Dice will slice up any object in a number of ways, not limited solely to rectangular, and NewBox will create a cube object. Not much use? Ah, yes, but it will give you a rounded corner box if you so desire, just like the ones in the example texture scene that comes with LightWave.



Slice & Dice beats the pants off the Julienne macro, as you can see to the right



Bottom line

REQUIREMENTS

RED *essential* | **BLACK** *recommended*

LightWave | LightWave 3.5

PRODUCT DETAILS

Product	MacroForm
Supplier	Activa UK
Price	$215 (~£138)
Tel	0181- 402 5770
E-mail	oaomedia@chelsea.ios.com

SCORES

Ease of use	**80%**
Implementation	**95%**
Value For Money	**95%**
Overall	**90%**

for creating organic models that standalone, but proves to be one of the less useful tools in practice.

RailLength *– a tool tool, really, RailLength will return the true 3D length of a curve and allow you to modify it. This comes in very handy when you are creating a model out of a range of parts that need to be fitted together because you can use it to make sure all your curves are precisely the same length, or fit to a desired area. RailLength can determine the length of closed or open curves.*

RailMold *– a bit like RailBend with a magnet. Because curves can double back on themselves, RailMold offers two methods for dealing with this – smoothing and smoothing with tacking. Smoothing ensures that no polygons double back on themselves, forming ugly lines, and smoothing with tacking allows you to deform your object as though it has been fastened to something at the points of least deformation in the curves you use. Try it, it's easier to see than explain!*

RailOffset *– this tool creates a polygon with a curve. All you need do is specify a width and how you want the ends to look. Using a control curve with this tool will result in a polygon with an outline like your control curve being extruded along the path of your apply curve. I know this doesn't make much sense, but you'll just have to try it.*

RebuildRail *– another tool tool, this one reconstructs curves that have been built in the wrong order for use with the other RailToolz. You can also increase or decrease the number of knots on a curve using RebuildRail, making it useful for reducing complexity in your models.*

RailRout *– this provides a service like a mixture of repeated bevelling and lathing, but unlike lathing can work on rectangular objects. It works by using a router to provide a 'path' for the extrusion to follow. The router bits can be saved off for future use and MacroForm comes with a number of presets for things like buttons and rounded edges.*

RailScale *– this squeezes your models in a similar way to RailForm and has a wrap option that behaves a bit like the Modeler's spherize tool, but wraps your shape to the curve or curves instead of a ball.*

RailSlice *– this tool slices your object using the points on a curve to determine where the slices will fall. You can use RailSlice with a few options to mimic the drill, tunnel, core and slice modes from Solid Drill and Boolean tools in Modeler.*

RailStretch *– this uses a curve to stretch your model and deform it. It can pull polygons out of line in much the same way as the magnet tool and, as with most of MacroForm's tools, really needs to be experimented with to find a use for.*

RailTwist *– this is the last of the RailToolz and twists your object about a chosen axis. The degree of twist depends on the curvature of your apply curve and is ideal for making cloth and other similar types of object.*

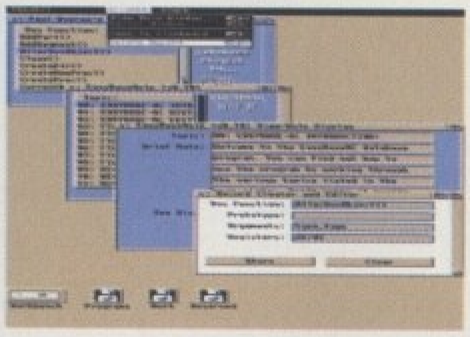
Operation database

Eyes down as **Paul Overaa** delivers more details of his database project

Part 2

This month we're going to begin looking at the EasyBaseAC which means we need to start with a few of the coding conventions I tend to use. I prefix all global variable names with g_ (as in g_port_mask) and all static variables, i.e. those items that act like global variables but are only 'visible' within the module in which they are defined, using s_. I also usually add a _p suffix to variables which represent pointers, although there are occasions, such as variables used to hold function addresses, where I choose not to do this.

Variable names are always lowercase, with individual words in the name being separated using underscores. Wherever practical I use names that mean something so when, for example, you see the variable g_public_screen_p in my code you are left in little doubt that this is a global variable which is a pointer to a public screen.



You'll see later that all other program windows use the same allocation/deallocation methods

Such conventions have but one purpose – to make life easier for both myself and anyone else who may need to examine my code. In the main I do try to stick to my own guidelines but not to the point where adherence becomes counter-productive. You'll find me using i, j, k etc., for loop variables just like other programmers. Similarly, there are times where fully explicit variable names end up too long to be practical – so shortened names have to be used. In short the guidelines I adopt are just that – guidelines, not rigid restrictions!

WINDOW SPECIFIC ALLOCATIONS AND DEALLOCATIONS

Some operations, like the opening of libraries that many modules within a program are likely to need, are best done as the program starts up. Other things, such as the resources needed for individual windows within EasyBaseAC, are best obtained as and when required.

At the moment EasyBaseAC has a main controlling module, an always-present main window with a scrolling (listview) gadget, an editing window, and a display only window. What we need to do, of course, is isolate the opening/closedown operations required, yet still keep those operations under the umbrella of our generalised allocation/deallocation framework.

Each window therefore allocates its own stack and reads its own array definition of the things that need to be done, as it opens. Similarly, as a window closes the window module code performs its own set of deallocations to ensure it closes down in a proper fashion.

To do this I use a stack ADT (abstract data type) module. You don't need to worry about how this operates internally (that's a story for another time), all you need to know is that by including a stack_adt.h header file in each source that requires stack facilities, and linking the stack_adt.o module into the final program, the access routines shown in listing 2 become available for use.

The benefit of this approach is simply that because each window takes responsibility for its own resource handling, other parts of the program never need to worry about what resources are being allocated.

When the user finally signals that they want to quit EasyBaseAC, all the main controlling code needs to do is check to see which windows are open and call their respective close routines.

Each open window then carries out its own deallocations independently (you'll see more of these ideas in subsequent window handling code)!

```
/* ------------------------------------------------------------------ */
UBYTE OpenInt(void)
{
UBYTE error_number=NO_ERROR;
if(!(IntuitionBase=(struct IntuitionBase *)
          OpenLibrary("intuition.library",INTUITION_VERSION)))
               error_number=ALLOCATION_ERROR;
  else {
               g_function1=CloseInt;
               PushStack(g_resource_stack_p,g_function1);

               }

return(error_number);
}
/* ------------------------------------------------------------------ */
void CloseInt(void)
{
CloseLibrary((struct Library *)IntuitionBase);
}
/* ------------------------------------------------------------------ */
```

Listing 1: Intuition library opening and closing with stack based resource tracking!

s=CreateStack(t)	this initializes a stack suitable for storing items of type t specified by the applications program and returns a pointer s to the stack's descriptor.
e=PushStack(s,x)	this stores item x on stack s and returns an error flag e that is TRUE if an error has occurred.
e=PopStack(s,x)	this retrieves an item from stack s and places it in variable x. Errors are signified by the returned error flag e being TRUE.
KillStack(s)	this unloads and then removes the stack s from the list of currently defined stacks. No return value.
f=StackEmpty(s)	this tests stack s to see if it is empty and returns a flag f as TRUE if there are no items on the stack.

Listing 2: The stack module access routines

ALLOCATION AND DEALLOCATION

From time to time in my assembler columns etc. I've talked about my stack-based schemes used to handle allocation and deallocation operations. Now you are going to get the chance to see how I do it from C when several different code modules are in use. Stacks, of course, store things on a last in first out basis and what my scheme does is ensure that ANY routine which successfully allocates or opens some returnable or closeable system resource pushes the address of a corresponding closedown routine onto a stack.

To allow for allocation failures as the program runs, I adopt the convention of having all allocation routines return error numbers that indicate whether they've succeeded or not. Providing these conventions are followed, a program is able to perform its closedown operations by using a loop to pull those deallocation routine pointers from the stack and executing the corresponding routines. The beauty of this approach is that the stack automatically deallocates things in the reverse order to the original allocations – things which are allocated last get deallocated first (a good, safe, general method to adopt with all Amiga programs).

How do I set up the allocation/de-allocation code and get the right pieces of code executed at the appropriate times? The best idea is to look at some example fragments. Listing 1 shows two routines which open and close the Intuition library. Notice that the first routine uses a PushStack() function in conjunction with a global variable called g_function1. Other allocation routines similarly add the addresses of their closedown routines to the stack, so it ends up holding pointers to all the deallocation/closedown routines that need to be performed to 'undo' the original allocations. Irrespective of the number of routines present on the resource stack, the complete deallocation/closedown procedure can always be carried out with this single line of code:

```
while(!PopStack(g_resource_stack_p,
g_function1)) g_function1();
```

The loop removes a pointer to a deallocation routine and then executes that function. It does this continually until the stack is empty.

For the initial allocations I set up a controller array which contains pointers to the allocation routines to be performed. The array is used in conjunction with loop code which reads the pointer list and duly executes the corresponding routines (see listing 3). Here's the array from the display-only window code that you'll find on disk this month:

```
#define W3_COUNT 6
UBYTE (*w3_list[])(void) = {
                CreateGadgetContext3,
                CreateGadgets3,
                CreateWindow3,
                CreateMenu3,
                CreateMenuLayout3,
                InstallMenu3
                };
```

```
UBYTE AllocateResource(UBYTE count,UBYTE (*list[])(void))

{

UBYTE i, error_number;

for (i=0;i<count;i++)

        {

        if(error_number=list[i]())

        i=count; /* force exit from loop */
        }

return(error_number);

}
```

Listing 3: The allocator function used to control resource allocation/deallocation

ANOTHER C TRICK

When programs involve many different modules and headers, defining and declaring variables gets quite involved. One program module can use variables defined in other modules providing 'extern' references are included in the module wishing to use them (to let the compiler know that the variables are declared elsewhere). Variables must, of course, be declared normally in just one file (so that memory can be allocated for storage).

There is a #ifdef C pre-processor trick that lets you use the same header file for both declaring and externally referencing a set of variables. The fragment shown in listing 4 comes from the EasyBaseAC general.h file that contains the names of the include files, program definitions, record structures and global variables used in the program.

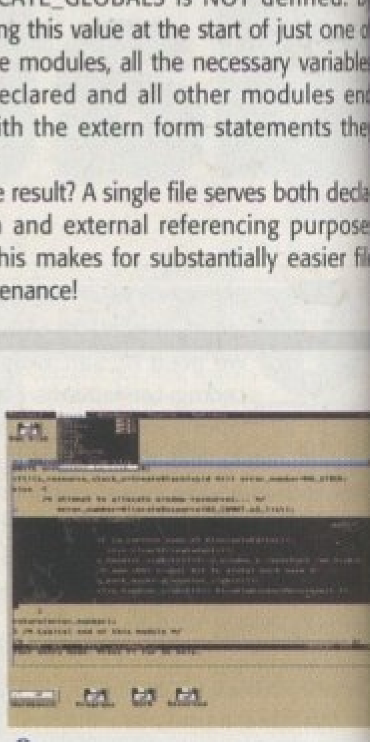
The important point as far as the globals are concerned is that the general.h header will only generate the extern reference if ALLOCATE_GLOBALS is NOT defined. By defining this value at the start of just one of the file modules, all the necessary variables are declared and all other modules end up with the extern form statements they need.

The result? A single file serves both declaration and external referencing purposes and this makes for substantially easier file maintenance!

```
/* part of general.h */
#ifdef ALLOCATE_GLOBALS
                #define PREFIX
        #else

                #define PREFIX extern
#endif
PREFIX void (*g_function1)();
PREFIX struct  IntuitionBase *IntuitionBase;
PREFIX struct  GfxBase       *GfxBase;
```

Listing 4: A useful header file pre-processor trick in action



Although DICE C is being used to handle the compilation and maintenance of the project, SAS's se editor is being used to create the code!

NOW IT'S YOUR TURN

You'll find one file on disk called general.h which identifies the includes, constants and globals used by the current version of EasyBaseAC. I've provided it this month just to let you see the extern prefix arrangements in action. You'll also find a file called window3.c which is the code for the EasyBaseAC display-only window and this provides a nice easy start to my window arrangements. Notice that the window, menu, gadget list, and resource stack pointers are all defined as static, so they're hidden completely from other modules of the program.

My OpenWindow3() function, near the start of the source, performs its own allocations and 'logs itself on as being open' by setting a copy of its signal bit in a global g_handler_sigbit[] array. When the CloseWindow3() routine is called the window module then deallocates the resources it was using and clears the appropriate signal bit copy. (Don't worry too much about the signal stuff at the moment, I'll be dealing with this area later.)

The various window/menu and gadget creation routines are based on the allocation/deallocation approach discussed in this issue. Most of the remaining code is straightforward Intuition/gadtool event handling. If, whilst the window is active, a message occurs it gets queued up at the window's user port. The event handler looks at the message and, depending on the message class, either does something with it, or passes the details to another routine.

Record information in memory is held in an exec list and you'll find a routine in the window3 source that, given a exec list node pointer, displays the information for that node in the gadgets attached to the window. You also find a routine for clearing the gadgets plus a couple of utility routines for enabling and disabling menu items (these are not used at the moment). All these routines expect valid pointers to the window, menu and so on and, since I have deliberately made such variables static (and so accessible only from within this module), it was essential for these routines to be physically coded within this module.

The window 3 module does, of course, check that its window is open before either displaying anything or clearing its gadgets. How? It looks at the s_window_p variable to see that it is non-NULL (which indicates that the window is open). The CloseWindow3() routine, incidentally, always clears this pointer whenever the window is closed. Examine the code, get a feel for the overall arrangements, and I'll give you more of the story next month!

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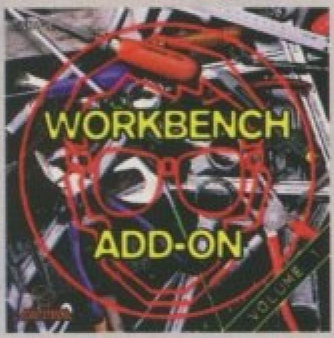
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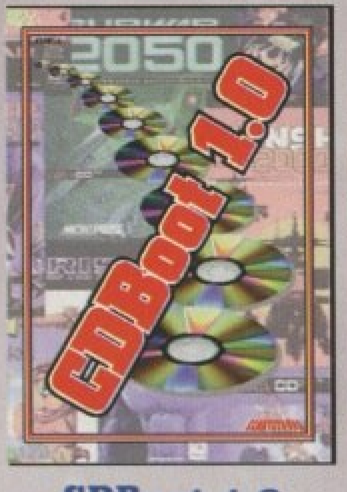
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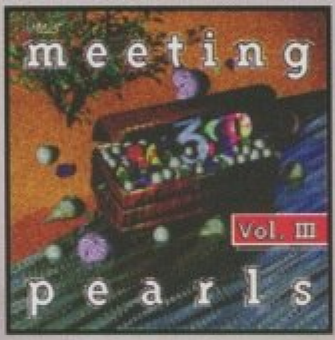
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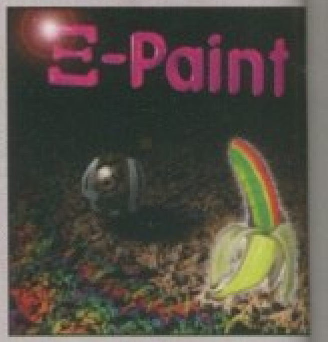
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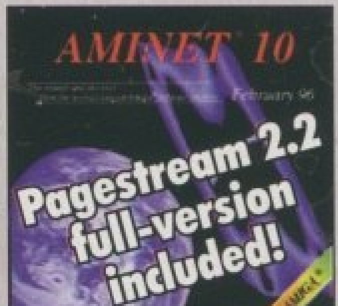
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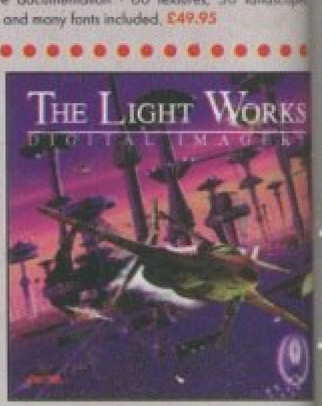
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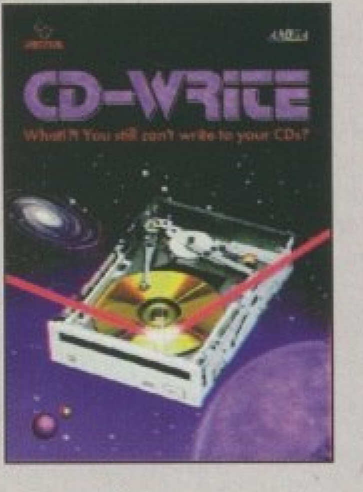
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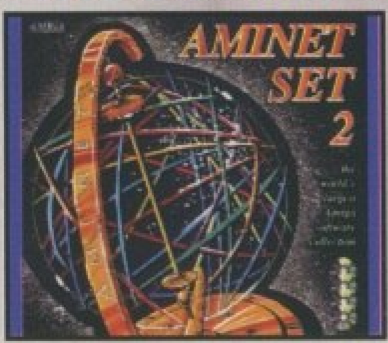
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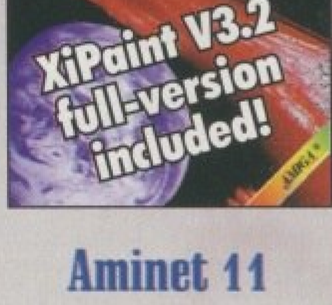
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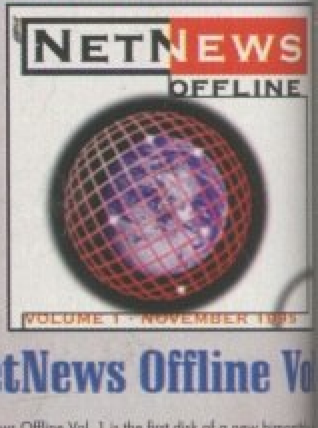
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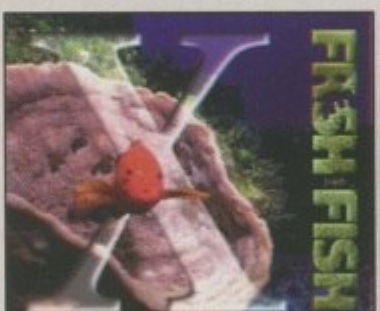
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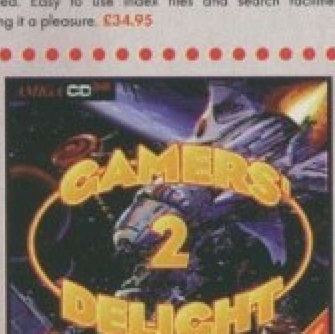
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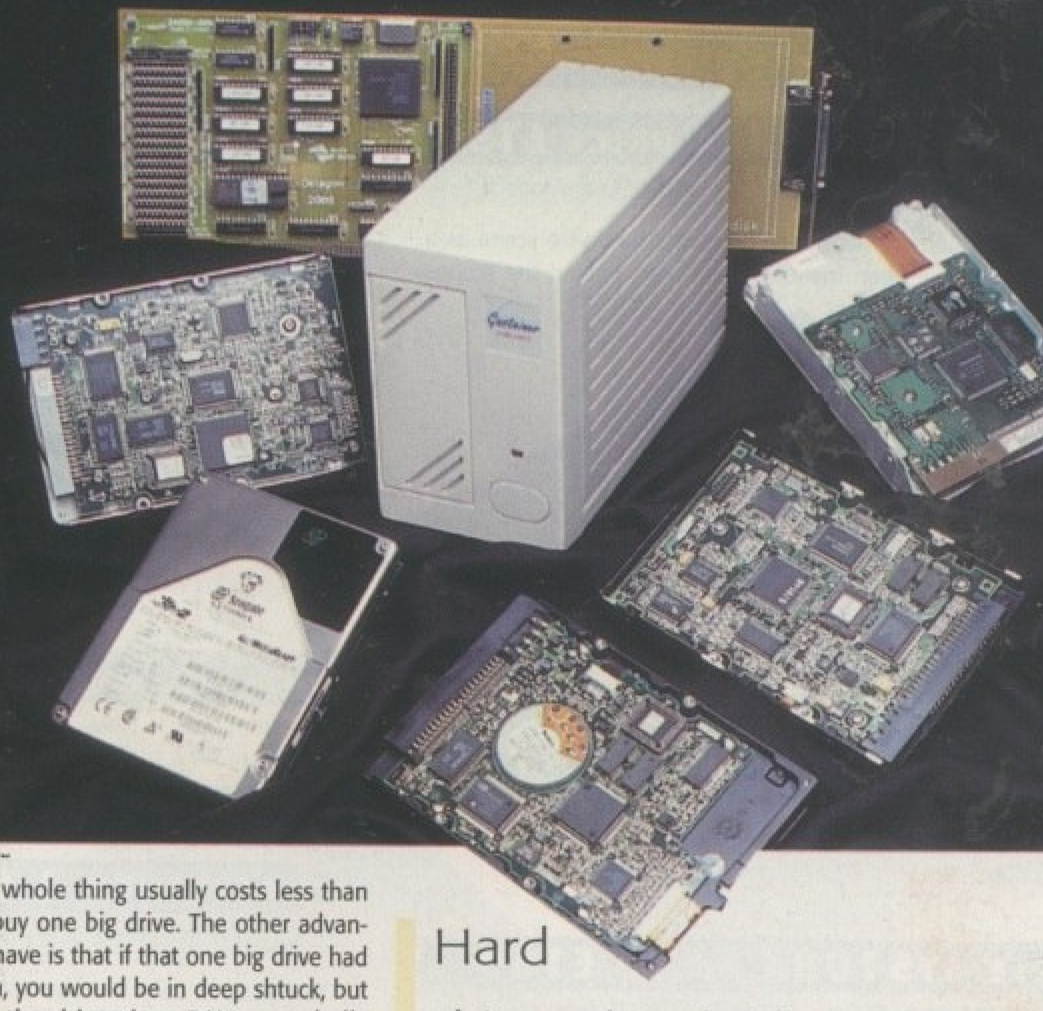
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HARD driving

Hard drives, hard drives, everywhere and not one under a gig. Frank Nord investigates a worrying trend in hard drive size



Hello? We're looking to do a feature on SCSI and IDE hard drives. Yes, that's right. No, we really want drives between 500Mb and a gig. What? Nothing less than a gig you say? Oh alright then, send us what you've got." And that's just how it was. We rang up a variety of companies and the smallest drive we could find was 640Mb, and it was the last batch.

So all the 340, 500 and 730Mb drives you see advertised are almost certainly the last ones you'll ever see new, and with prices coming down all the time for 1Gb and above drives, it might be worth the extra few bob to get one of those instead. The first drive I ever owned for my Amiga was a Quantum L120S drive which came to me in a box that was labelled 'For military use only'. I never found out whether this was just a spare bit of packing, or whether I ought to dress in combat fatigues to use it, but it performed beautifully and made a huge difference to my computing.

Capacity

Nowadays, I have nearly 2Gb of hard drive space, and I'm still running out and, all told, it's cost me only slightly more than that venerable 120Mb drive. Unfortunately for us Amiga users, doubling my hard drive capacity is about as far as I can go because of the handy little thing that allows me to shift my drive to someone else's hard drive controller – the RDB. The RDB (or Rigid Disk Block) is a 32-bit number at the start of a hard drive that tells the host computer what size it is, how many partitions it is, and so on. But why can you only have about 4Gb of hard drive space on your machine (should you ever be lucky enough to get that kind of space)? Well, what size was that number again? 32-bit, right. Well a 32-bit number only has 4,294,967,296 combinations and that equates to about 4.3Gb or, to be more precise, 4,294,967,296 bytes.

At the time the RDB was conceived, this was a staggering amount of hard drive space, and it was inconceivable that anyone would ever need that much room. At the time, my 120Mb drive was actually quite large. But as is ever the case with computer technology, saying 'Ooh, no-one will ever need, or be able to afford, 4.3Gb of hard drive space, a 32-bit number will be plenty', is almost a guarantee that hard drive prices will plummet and sizes will expand exponentially. And thus it was. Still, owners of VLab Motions, PARs, DB32s, AD516s and Toccata cards, etc. needn't worry about exceeding this 4.3Gb limit as their cards don't use AmigaDOS-formatted hard drives and are thus exempt from the limit for the hard drives they use on those cards.

On platforms that don't have this limitation you can get things called RAIDs (Rapid Array of Inexpensive Disks), which are basically boxes filled to the brim with hard drives of around the 1Gb mark typically which all act together as one big, very fast, hard drive. The reason RAIDs are so fast is that you are increasing the number of heads looking for the information on the disks, and because you are only using smaller hard drives in the RAID, the whole thing usually costs less than trying to buy one big drive. The other advantage you have is that if that one big drive had a problem, you would be in deep shtuck, but if one of the drives in a RAID goes belly up, sure, you'll lose some data, but at least you'll still have the other drives up and running.

Size vs speed

On a similar point, do you know why large hard drives are faster than smaller ones? No, well the reason for this is because on a 3.5" drive, a 1Gb drive has less space between the sectors and tracks for the head to skip across than on a 120Mb drive, and this means a faster access time, even though the drive can hold more data and thus, theoretically, there is more data to look through before the desired data is found.

So, anyway, onto the drives themselves. We have a mix of IDE and SCSI drives (just the two SCSI drives actually) from a variety of manufacturers. All the drives are 3.5" devices and are larger than 1Gb (apart from the Quantum at 640Mb), because that's what the manufacturers want us to show. If you can't afford one of these drives at the moment, well, there's not much you can do, but the prices are coming down fast, so you'll only have to wait a while.

SETTING IDE DRIVES UP

Because you can only have two IDE drives on a controller, you'd think the configuration would be even easier than for a SCSI drive, but there are more possibilities than you might imagine. You've got Master, Slave and Master with Slave present. These different modes represent the different ways of setting up one or two IDE drives on a machine, but quite often you'll need to change several jumpers to make it so.

Fortunately, IDE drive manufacturers have started to try to cut out the Master with Slave present option so you only have to fiddle with one set of jumpers. In fact, the only drive that gave us a problem for setting up was the skinny Seagate. I had set the Seagate that came with our A4000 as a Slave drive so that I hopefully wouldn't have to change anything on the other drives, but the Seagate we reviewed had to have its jumpers changed. All very well, but the chart showing how the jumpers had to be set was very confusing.

We rang up a variety of companies and the smallest drive we could find was 640Mb, so all the 340, 500 and 730Mb drives advertised are certainly the last ones you'll ever see

THOSE BENCHMARKS

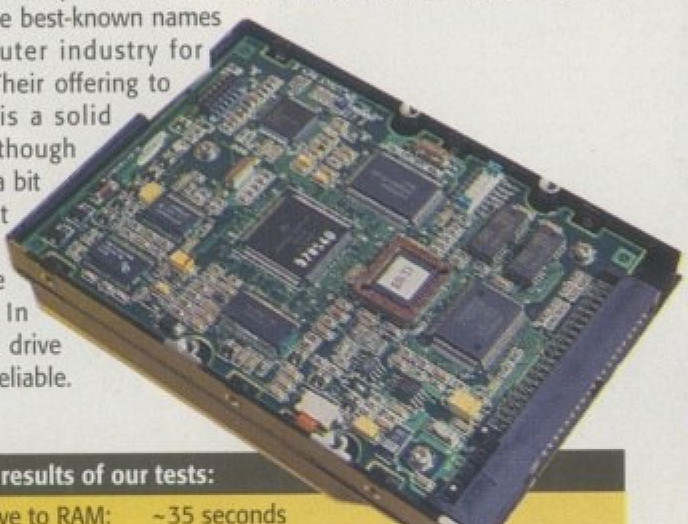
Our benchmark test consisted of copying the MUI directory you get when you unpack it from this month's coverdisk to and from the drives from RAM:. As a last test we also used the current version of SysInfo (3.23) to check the speed of the drive. As we should all know by now, SysInfo's results can be very misleading depending on your screenmode, etc. so here is our system set-up in full:

We have an A4000/04 with 18Mb of RAM. We ran all tests on an eight colour screen in DoublePAL mode. For the file copying we used Directory Opus 4.12. SCSI drives were tested off the Oktagon card's external SCSI port.

SAMSUNG PLS-31084A PRICE £199

3.5" 1.08Gb IDE drive, 5.75" long, 1" high. 1029Mb formatted.

Samsung are a relative newcomer to the computer hardware scene as a brand, although they have been manufacturing parts behind the scenes for some of the best-known names in the computer industry for many years. Their offering to this line up is a solid performer, although it does make a bit of a racket when you turn on the machine. In operation the drive is sturdy and reliable.



Here are the results of our tests:	
Copy from drive to RAM:	~35 seconds
Copy from RAM: to drive	~35 seconds
SysInfo speed rating:	1,680,410 bytes per second

SEAGATE ST5108A PRICE £169

3.5" 1.08Gb IDE drive, 5" long, .75" high. 1032Mb formatted.

Ahh! What a tiddly little drive! This Seagate is certainly small enough to cram inside your A1200 as the latest style seems to be, but it does have a standard drive connection, so anyone intending to do so will have to get a 44-pin cable to 40-pin cable-and-power-cable adaptor. The drive feels fast in operation, notwithstanding the poor results given by SysInfo, and has Seagate's usual warranty.

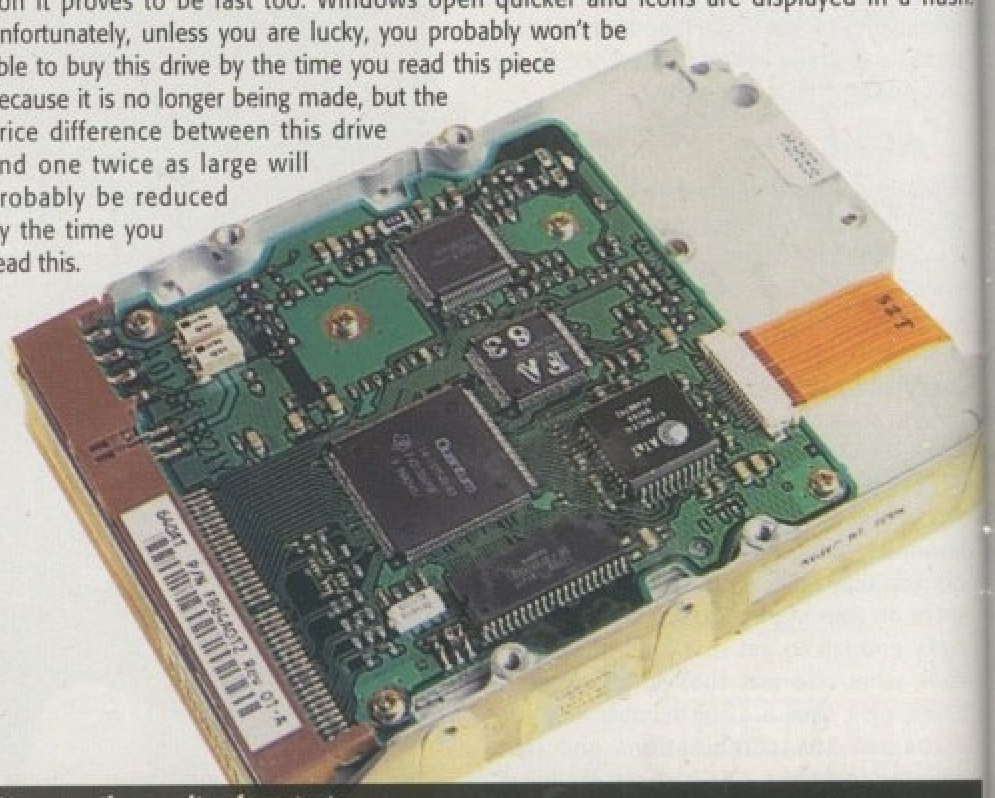


Here are the results of our tests:	
Copy from drive to RAM:	~32seconds
Copy from RAM: to drive	~35 seconds
SysInfo speed rating:	1,195,185 bytes per second

QUANTUM FIREBALL 640AT PRICE £96

3.5" 640Mb IDE drive, 5.75" long, 1" high. 611Mb formatted.

Quantum have always had a good name for themselves when it came to SCSI hard drives – they come as standard with Apple machines – but their IDE hard drives were never known for their turn of speed. However, the Fireball is a great drive. Not only does it feel speedy, in operation it proves to be fast too. Windows open quicker and icons are displayed in a flash. Unfortunately, unless you are lucky, you probably won't be able to buy this drive by the time you read this piece because it is no longer being made, but the price difference between this drive and one twice as large will probably be reduced by the time you read this.



Here are the results of our tests:	
Copy from drive to RAM:	~35 seconds
Copy from RAM: to drive	~29 seconds
SysInfo speed rating:	1,713,359 bytes per second

GASTEINER 1.08GB EXTERNAL PRICE £229

3.5" 1.08Gb external SCSI drive, case is 8" long, 5.5" high, 3.5" wide. 1073Mb formatted.

The Gasteiner drive is actually IBM's Pegasus model and performs very well in association with the supplied Oktagon controller card. The case has the familiar push button SCSI ID switch and two 50-way SCSI connectors. It has no internal termination switch or drive LED, but the power switch is handily located at the front of the case. The drive is fast and quiet and is apparently a best seller at Gasteiner. Again, the hard drive appeared to work harder than its SysInfo results bear out.



Here are the results of our tests:	
Copy from drive to RAM:	~33 seconds
Copy from RAM: to drive	~34 seconds
SysInfo speed rating:	1,614,850 bytes per second

FIRST COMPUTER CENTRE 1.08GB EXTERNAL PRICE £299.99

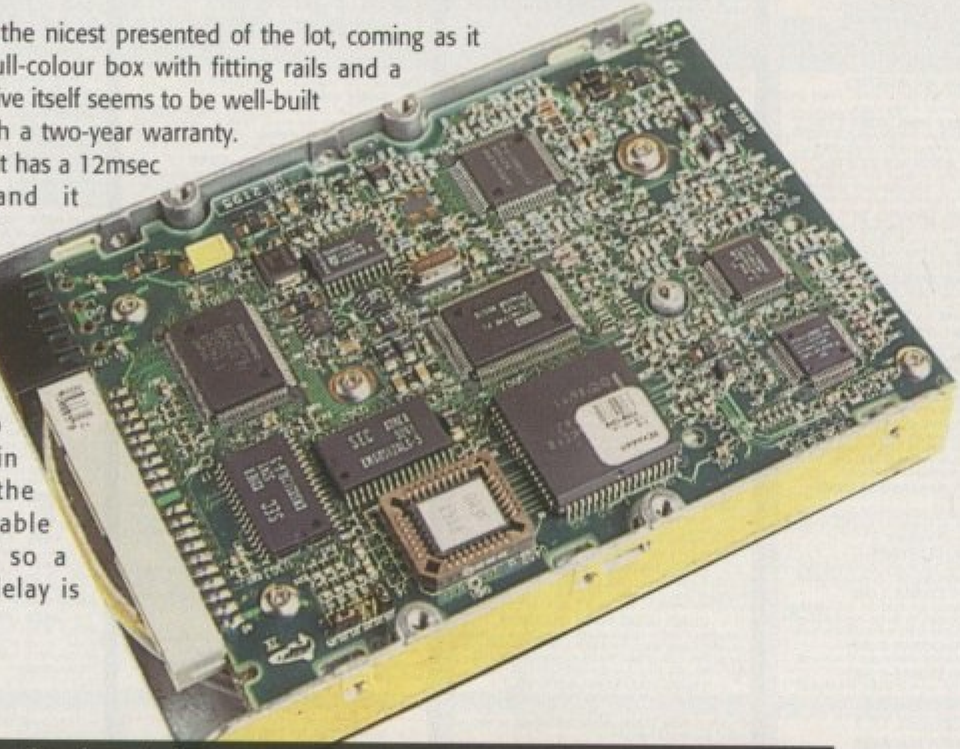
3.5" 1.08Gb external SCSI drive, 9.75" long, 5.5" high, 2.25" wide. 1042Mb formatted.

This last drive on our list is First Computer Centre's offering. Unfortunately, it arrived too late for photography, but it comes in a smart, stylish case with an LED for power and one for drive activity. The back of the box houses two 25-way connectors (like the Amiga end of the parallel port) rather than the more normal 50-way Centronics-type connectors. It has an internal terminator with a switch and a dial for selecting the SCSI ID. The drive is a Quantum Fireball 1080S drive which gives solid, but not outstanding performance in this case. This may have something to do with the 25-way cable, although I doubt its length will be a problem – it's only about a foot long at most.

Here are the results of our tests:	
Copy from drive to RAM:	~35 seconds
Copy from RAM: to drive	~36 seconds
SysInfo speed rating:	1,598,439 bytes per second

MAXTOR 71626AP PRICE £226

3.5" 1.6Gb IDE drive, 5.75" long, 1" high. 1553Mb formatted.



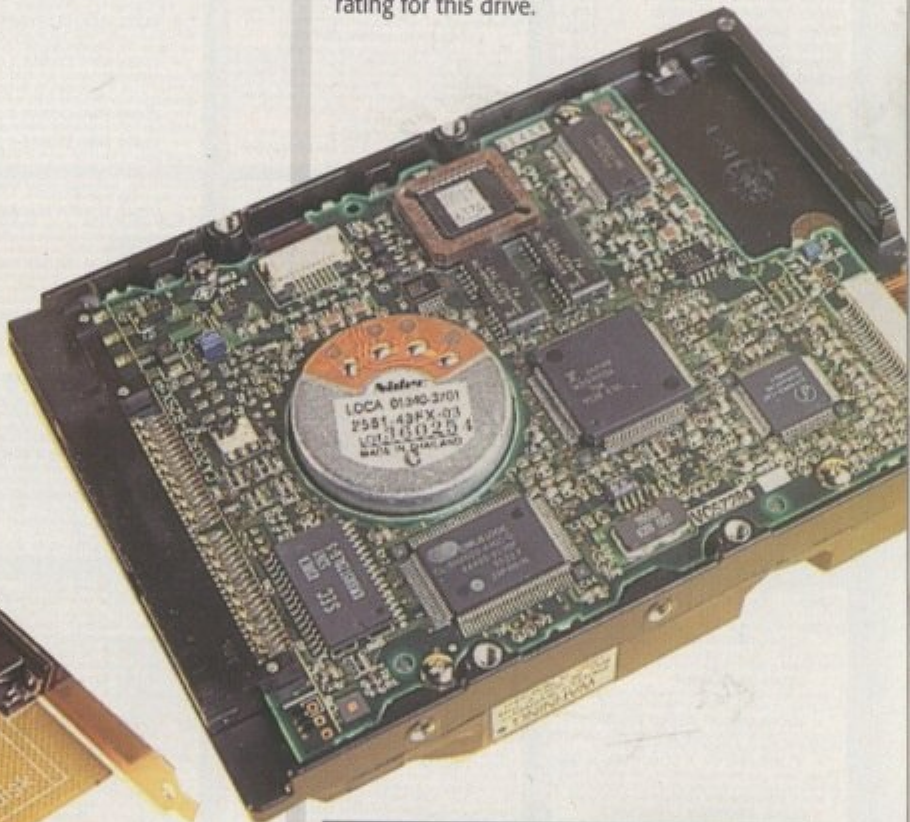
This drive was the nicest presented of the lot, coming as it did in a big, full-colour box with fitting rails and a manual. The drive itself seems to be well-built and comes with a two-year warranty. Maxtor reckon it has a 12msec seek time and it certainly felt reasonably quick in everyday use. The Maxtor was slow to spin up and resulted in us getting the 'Insert bootable disk' screen, so a longer boot delay is required.

Here are the results of our tests:	
Copy from drive to RAM:	~36 seconds
Copy from RAM: to drive	~38 seconds
SysInfo speed rating:	1,743,751 bytes per second

FUJITSU M1614TAU PRICE £145

3.5" 1Gb IDE drive, 5.75" long, 1" high. 1039Mb formatted.

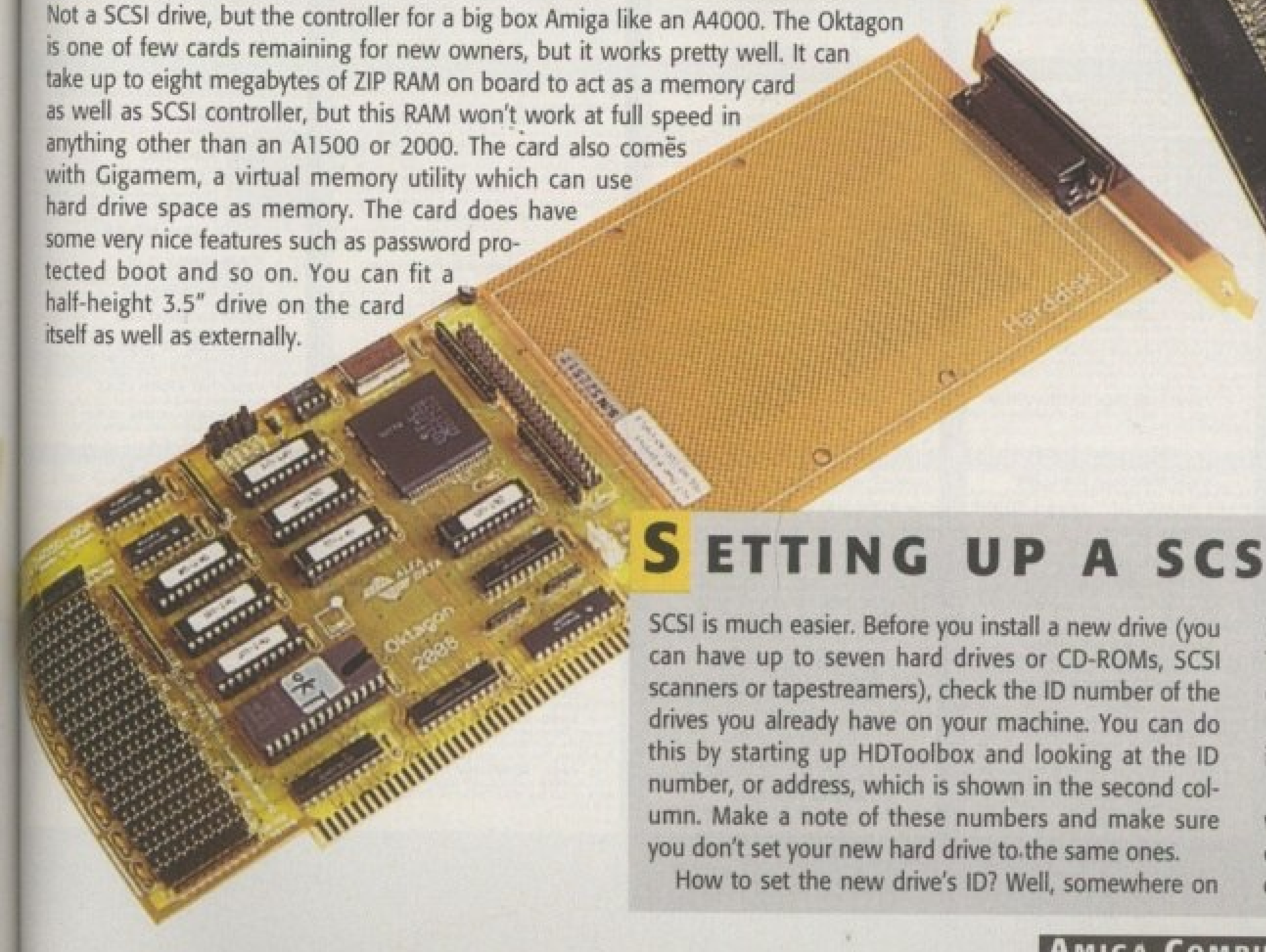
The Fujitsu was another slow booter. If you don't mind resetting your machine once you have reached the bott screen, then this is no problem. If, however, you are one of those impatient people, you'll need to get one of those boot delay programs readily available on the Net. The Fujitsu performed well other than this problem and its jumper settings were easy and clearly printed on the case. For some reason, the Fujitsu drive wouldn't show up in the list of drives available for SysInfo's speed test, although it did turn up in the list if we pressed the SCSI button on the same page. Thus we have no SysInfo rating for this drive.



Here are the results of our tests:	
Copy from drive to RAM:	~43 seconds
Copy from RAM: to drive	~38 seconds
SysInfo speed rating:	Not available

ALFA DATA OKTAGON SCSI CONTROLLER CARD

Not a SCSI drive, but the controller for a big box Amiga like an A4000. The Oktagon is one of few cards remaining for new owners, but it works pretty well. It can take up to eight megabytes of ZIP RAM on board to act as a memory card as well as SCSI controller, but this RAM won't work at full speed in anything other than an A1500 or 2000. The card also comes with Gigamem, a virtual memory utility which can use hard drive space as memory. The card does have some very nice features such as password protected boot and so on. You can fit a half-height 3.5" drive on the card itself as well as externally.



SETTING UP A SCSI DRIVE

SCSI is much easier. Before you install a new drive (you can have up to seven hard drives or CD-ROMs, SCSI scanners or tapestreamers), check the ID number of the drives you already have on your machine. You can do this by starting up HDToolbox and looking at the ID number, or address, which is shown in the second column. Make a note of these numbers and make sure you don't set your new hard drive to the same ones.

How to set the new drive's ID? Well, somewhere on it should be a set of jumpers usually numbered 1,2 & 4. These are your bit values and they work in binary. If you don't have any jumpers your ID is 0, if you have one on 1, then your ID is 1. One on 2 and 4 means that your ID is six and so on.

If your hard drive is an externally cased one, then you will probably have a dial to change the SCSI ID of the drive. If not, you'll need to take the case apart to change the drive's ID.

PDSOFT

1 BRYANT AVENUE
SOUTHEND-ON-SEA
ESSEX, SS1 2YD
TEL 01702 466933
FAX 01072 617123

VISA

DISK PRICES

MINIMIUN ORDER 5 DISKS

5 Disks For £10 + £1 P&P
10 Disks For £17 + £1.43 P&P
15 Disks For £21 + £1.43 P&P
20 Disks For £25 + £2.45 P&P

CDROM BASED

CD010	GOLD FISH 1	£19.99
CD028B	FONTS & CLIPART	£9.99
CD033	THE AMOS LIBRARY	£16.99
CD034	ASSASSINS GAMES	£4.99
CD039	17 BIT THE CONTIN	£9.99
CD040	EUROSCENE	£4.99
CD042	W.SCIENCE CLIPART	£7.99
CD043	W.SCIENCE FONTS	£7.99
CD044	SOUND TERRIFFIC	£19.99
CD051	PRO IFF & PCX	£9.99
CD057	LIGHT ROM 1	£39.99
CD058	GOLD FISH 2	£19.99
CD059	AMOC 2&3	£19.99
CD060	HOTTEST 4	£7.99
CD061	VARIOUS 1-1500	£7.99
CD062	LSD TOOLS	£7.99
CD065	17 BIT LIBRARY DISK 4	£7.99
CD066	TOWN OF TUNES	£19.99
CD067	ILLUSIONS 3D	£5.99
CD070	POWER GAMES	£9.99
CD071	ULTRA MEDIA 1+2	£14.99
		£17.99
CD077	DESKTOP VIDEO	£14.99
CD078	EMERALD MINDS	£14.99
CD097	FRESH FONTS	£14.99
CD098	W/S ANIMS	£17.99
CD099	LSD TOOLS 2	£19.99
CD103	FRESH FONTS 2	£19.99
CD108	BEAUTY OF CHOAS	£4.99
CD113	GIGA GRAPHICS 1,2,3,4	£29.99
CD114	THE LIGHT ROM 2	£39.99
CD115	FRED FISH TEXTURES	£39.99
CD141	THE LIGHT WORKS	£19.99
CD142	MEETING PEARLS 2	£8.99
CD143	TETRA SOUNDS	£7.99
CD147	CD WRITE	£44.99
CD148	PHOTOGENICS	£39.99
CD149	VIDEO CREATOR	£34.99
CD156	MAGIC ILLUSIONS	£7.99
CD165	GATEWAY	£8.99
CD168	UPD SET 1	£24.99
CD176	CRAFTWORKS	£8.99
CD183	GURU ROM	£49.99
CD186	GROLIER ENCYCLOP	£24.99
CD190	IMAGINE 3.0 ENHANC	£39.99
CD191	LIGHTWAVE ENHANC	£39.99
CD192	SUPER CARS - PICS	£4.99
CD202	FROZEN FISH 95	£19.99
CD203	WORLD INFO 95	£39.99
CD205	ARCADE CLASSICS	£14.99
		£18.99
CD212	17 BIT PHASE 5	£18.99
CD213	LSD COMPENDIUM 3	£16.99
CD219	FRESH FISH 10	£19.99
CD225	AMIGA TOOLS 3	£24.99
CD226	XI PAINT	£39.99
CD227	GOLDFISH 3	£19.99
CD228	GAMERS DELIGHT 2	£24.99
CD234	ZOOM 2	£18.99
CD236	W/S COLOUR ART	£7.99
CD237	OCTAMED 6	£29.99
CD247	PERSIONAL SUITE	£39.99

* Please double check prices when ordering as many of the above are Special Discounts

DISK PROGRAMS

DK001	MEGALOSOUND	£29.99
DK002	SIEGFRIED ANTI VIRUS	£49.99
DK003	DIAVOLO BACKUP	£49.99
DK004	IDE-FIX	£44.99

PROGRAMMING + TEK

^ + V0298 NORTHC V1.3 (AB)
The latest update on the public domain 'C' environment for the Amiga that I am aware of.

^ + V0523 DICE C COMPILER (AB)
Contains Matthew Dillons full featured, powerful C compiler and environment system.

^ + V0786 PASCAL
Contains everything needed to program in Pascal. Includes A68k 68000 assembler, Blink, Linking software and PCQ, a modest Pascal sub set compiler a

^ * V1041 DIGITAL BREAD BOARD
is a full GUI digital logic circuit simulator. Digital Breadboard currently supports 2 and 3 input etc

^ + V1056 DEVELOPER
Contains the official Commodore developers kits for the Amiga Guide and Commodore Install utilities.

^ + V1060 CIRCUIT BOARD DESIGN
Several terrific routines for the electronic enthusiast. Includes PCBtool, a circuit board design tool.

^ + V1209 GNU C+ + COMPILER (3) [HD]
Theses disks consists of the latest version of the GCC environment. Thus the compiler, driver, assembler, linker, header files inline code generation of library calls.

^ + V1213 PROGRAM LANGUAGES
ACE v1.02, is a PD Amiga BASIC compiler which, in conjunction with A68K & Blink produces stand alone executable's, run time shared libaries are required.

^ * V1227 GAD TOOLS V2.2C
A standard Amiga shared runtime library which makes it a lot quicker / easier to build standard requesters into programs. Designed with CBM's guidelines in mind.

^ + V1384 HOW TO CODE IN C (AB)
Covers Debugging, Intuition and Graphic, KodbiblioteK, Tips & Tricks, Aeropa AsmFrank, Dos Intuition, WB start, DMake, GadToolsBox and Power Source.

^ + V1430 N.D.U.K V37 (ABCD)
Portions of the Commodore Native Developer Update Kit that can be licensed for distribution. Includes the fd files, libraries, startups, C include files, and tools

^ + V1905 MATHS FORMULA EDIT V2.1
MathScript is a formula editor, which is used to integrate mathematical formulas into word processors or DTP programs. It has an extensive amount of mathematical and physical symbols and many control codes for creating fractions,roots, exponents.

^ + V1909 REQCHANGE V3.6
Patches Intuition, ASL, ARP & REQ to use the Req Tools requesters instead. It also adds a couple of extra features, like an Assign Wedge, the possibility to send ARexx commands when a patched requester appears, & several options to configure how the patches behave.

^ + V1919 MOTOROLA CROSS ASSEMBLER'S V2.0
Assembler's A50,1,4,5,9,11

UTILS & POPULAR

^ + V1362 CHECKERS TOOLBOX
Incredible Amiga diagnosis program. Runs self test on all chips, all the ports and even the disk drive! All your hardware is tested and displayed in graphical information. Every Amiga owner should have a copy! Find out what is wrong with your Amiga before going to the repairers to get it fixed. It may save you a bob or two!

^ + V1405 VIRTUAL UTILITIES
Contains 5 utils containing everything needed for any Amiga user to make virtual memory from their harddrive. The Amiga is fooled into thinking it has massive amounts of RAM when really it only has a small amount mapped to a file on the harddrive.

^ + V1719 TELETEXT V2.3
View Teletext (also know as Teletekst, Videotext, Ceefax, Skytext, Supertext etc.) on your Amiga. It is suitable for any PAL Amiga (read #) System requirements. link systems req] for more info, because it uses the parallel port to interface with the hardware. An electronic switch is provided to easily switch between the TeleText decoder and a printer.

^ ^ V1335 LIBARIES & DATATYPES
This is a disk packed full of Amiga Workbench 3.0 Libraries and Datatypes. There's 47 Libraries from A to Z all libraries covered are right up to date and waiting to be installed. The disk also have installation notes to aid the beginners. also files in the L and Devs/DosDrivers drawers that can be copied or assigned.

^ + V1641 SUPER KILLERS V10.0
The latest collection of virus killers like AntiCicloVir v2.2a, Virus Checker v6.43, VirusZ II v1.07, and VT v2.67. Req the use of LHA which is in the c directory.

^ * V1017 POST V1.86ENH (ABC)
PostScript interpreter which implements the full Adobe language. Supports Adobe type 1 and type 3 fonts, screen output, file output, and printer output.

^ + V1593 EPU DISK STAKKER V1.7
Double your hard drive capacity by installing EPU. After installing EPU to any Device (HardDisk, Floppy, Rad etc) every file which will be written to the device will be compressed & when any compressed file is read by any application it will be decompressed.

^ * V1039 HD INSTALLER (AB)
Bought an A1200 machine and are having trouble with your hard drive why not install it correctly.

^ * V1136 DISKSALVE 2
Repair your hard drive with this, recommended.

^ + V1326 C: COMMANDS & LIBS
The C: and LIBS disk contains over 300 commands for within the C directory. Over 20 LIBRARY's are within the LIBS directory. Use them for your disks. They can be used to spice the disk up in appearance and in usage.

^ + V0490 MESSY SID II
once loaded will read MS Dos disks, Convert any text (asc) files on to an Amiga dos disk so that they can be loaded into any standard Word processor. The program will also convert the text back to your IBM disks.

^ + V1611 SNOOPDOS V3.0
Log's all the dos/library calls and more when you run a program. This is handy for both the programmer and the beginner. Have you ever installed a program to your harddrive and then discovered that it will not run without a certain library but you don't know which?

^ + V1928 VIRUS WORKSHOP V4.8
This is the one and only Virus Workshop by Markus Schmall. Now in the Version 4.8. Test it!

^ + V0424 ANTIFLICKER
A program to stop the Flickering when you use the Amiga in Hi res move.

^ + V1669 TUDE V1.0
is a very extensive and easy way of degrading your machine for all sorts of purposes. It is useful for playing old game on A1200s for example which need kickstart 1.3. There is a GUI version included as well as a CLI version so most people will have no trouble using it. A highly useful tool for all Amiga owners. Good.

^ + V1523 RELOKICK V1.41
ANOTHER(!) version of ReloKick. Galahad of Dual Crew did ReloKick 1.4, so I decided to improve on that!

^ + V1356 NOERRORS V1.3
Its main function is to hide physical disk errors from floppy disks and hard disks, so these disks can then be used without DOS showing read/write errors.

^ + V0662 DCOPY V3.1
Best PD copier on the Amiga. No new Features over 2 but has been updated with new code information.

^ ^ V1164 (AGA) ASA FIX DISK
An entire disk full of utilities for those A1200 and A4000 owners out there who can not for the life of them get some of there favourite games or demos to work.

^ * V1360 WB2.0 TUTORIAL
There is a lot more options open to you than just playing games. In the chapters Files Explained & Menus, attempt to explain the workings of WB2,as the manuals supplied with your Amiga.

^ * V1242 RE ORG V3.11
is a fast disk optimizer that can be used for floppy disks and hard disks. Supports new Kickstart 2.04 features including hard and soft links and High Density drives.

^ + V0685 APRO ASTROLOGY V3.5
Astro_22 as released is a starter program which accurately calculates the position of the planets, cusps and zodiac positions to within 30 seconds of arc. I intend to increase the usefulness of the program to eventually cover all aspects of the subject which will appeal to professional as well as novice astrologers not wishing to pay 200s for a decent package. Updated version.

^ + V0489 AMIBASE PRO II
This is the latest database program which is an update

^ + V0827 REPAIR IT V2.01
An essential set of tools for recovery. Disk speed reports the speed of a selected drive. DiskSalv will try to recover as much data as possible from a corrupt disk. HDTool will install the OS3 disk caching and FFS to the hard drive of a lesser operating system.

^ ^ V1661 NATIONAL LOTTERY
This is a national lottery prediction program called Lottery Winner. It consists of a database system which can record the National Lottery results from week to week until it has sufficient data to make certain types of predictions or just a random guess. Good.

^ + V1679 COP THE LOT
Lottery prediction/database which can store the previous lottery results and also select random numbers etc.

^ + V1771 COURSE FORM
Like to put a bit of money on the horses? This utility allows you to enter the figures for the horses in a particular race, plus the course details, and then it will try to predict the winner of the race. Good.

^ + V1778 LOTTERY CHECKER
is a great tool for checking lottery numbers. Good for office syndicates. Find 'A' Date is a database which stores and matches people up for blind dates. Sneaker is used to view and change binary files, technical users are always finding these programs useful.

^ * V1836 MRBACKUP V2.1.4
is a hard disk backup program for the Commodore Amiga family of computers. It provides a wide range of services to support Amiga file management and backup/restore of files to/from hard disk.

^ + V1837 DISK DOUBLING V1.98
This package allows you to create virtual partitions on your HD. Files stored in such partitions get automatically compressed and decompressed whenever you access them, in a transparent way.

^ * V1838 VMM V3.0
A virtual memory manager for Amigas with 68040/68030 or 68020+68851 processor.

^ + V1932 X-FILES GUIDE
The X-Files Guide disk is full of very useful information if you are interested in the x-files. It contains over 674k worth of text, ranging from episodes 1 and 2 to the x-files transcript. It also has a survey you can fill in and send off to the author of the disk.

^ + V1949 MORE HD INSTALLERS
This disk contains the latest installers for the following games: ABASE, Arnie 2, ATR, Bump 'n' Burn, Naughty-ones, Rise of the Robots, Sensible World of Soccer, Shadow Fighters, Lion King, MKII_PAFIX, Parasol Stars, Rock'n'Roll, Skidmarks 2, Skeleton Krew, Super Stardust, SoftB3, Trolls and Uridium 2.

^ + V1963 VIRUS WORKSHOP V5.1
This version of Virus Workshop is as good as any of the others or even better. You can check every single file on there own or all together. If it finds a virus it will tell you what it is and exactly what to do to get rid of it. This is probably the best version of Virus Workshop so far and well worth buying.

^ + V1965 BALLS
Balls is yet another lottery predictor program. It is actually quite good apart from the £5 fee if you want to get the registered version. It can predict random numbers or numbers from pre-entered numbers of upto 72 weeks earlier. A well presented lottery predictor, if your into all the lottery hype get this.

^ * V1969 AQUARIUM SIMULATOR
3d Aquarium Simulator (uses MUI2.0), check it out.

^ + V1982 SCOUT V2.1
Scout is a tool that allows you to monitor your computer system. It displays many different things like tasks, ports, assigns, expansion boards, resident commands, interrupts, etc.

^ +V1983 DOPUS UTILS 2
This is the second selection of utilities for use with the most popular Amiga Disk utility Directory Opus.

^ +V1996 PRO-GAMBLE V2.1
This is a great piece of software for those of you who wish to gamble. You simply enter which daily news/race paper you are reading then it asks a number of questions relevant to that paper. Once all the race information has been put in you can go ahead and check the estimated results etc.. Very good indeed.

^ +V1997 LOTTERY PREDICTOR
Another lottery prediction system. This latest addition has a few added advantages over the other available. For a start this one uses intuition fully so it multitasks and it uses only a small window on your workbench. Also it looks very nice! The added touch of the lottery symbol makes all the difference. The best lottery predictor yet.

^ + V1998 AMIGADOS GUIDE V1.5
A very handy program for those who want to learn more about Amiga DOS or those who simply want an easy reference for commands etc.. The program consists of an easy to use point and click system with a index.

^ + V1999 COP THE LOT PRO
Yet another lottery program. This one will only generate random numbers, there is no option to actually make any sort of calculated prediction. There is also a Numbers drawn database and a My guesses database to help you keep a record of the numbers you have been choosing.

^ + V2000 BACK DOOR V6.0
This is the latest version of this now quite well known game cheat database. There are cheats and tips for hundreds of different games including a lot of recent titles. There are even long entries for games such as Dune II, which is a tactical game, detailing good methods of play.

^ + V2001 NATIONAL LOTTERY
This program is more than just a random number generator. It uses uses a special History formula with Chaos Theory to produce a more accurate prediction.

^ + V2002 MULTI-PRED
This is a program that will attempt to correctly predict the results of many different games and betting systems. These would include the national lottery, pools and more. Quite a complex program to setup. Good.

^ + V2004 LOCKUP V4.0
is the newest version of the old utility Lockup which basically allows you to Lockup your hard drive with a password to enter and get it going again.

^ + V2005 SHAPE SHIFTER 3.2
is a multitasking shareware Macintosh-2 emulator for the Amiga. It allows you to run mac software without additional hardware. New updated version.

^ + V2014 MESSY SID 3.0
this is the latest version of which will read and write PC Floppy disks 720k or 1.44 if your drive can take it.

^ + V2015 MOVIE MAKER 2.0 (AB)
have you ever wanted to create your own movie and see it flourish in the Oscars, then now's your chance.

^ + V2024 VIRUS CHECKER v2.18
Kill that new virus with the latest version of the most famous virus killer in the business. Top rated by all.

^ + V2026 ROUTE PLANNER
Highway trip planner. Requires MUI 2.2

MAGIC W/B & WORKBENCH

^ * V1839 MAGIC WORKBENCH 1.2
A superb utility! completely wipes over all those horrible workbench icons, replacing them with its own versions. It also adds patterns and changes your workbench fonts. The end result is a much more attractive workbench. Easy and safe to install. Looks great!

^ + V1834 MAGIC W/B PALETTE
version of MAGIC W/B palettes 35 total! Pretty Magic WorkBench icons for Sound & Misc Apps.

^ * V1808 ROMAN MWB ICONS 7
New, high quality, standard size, MAGIC W/B2.0 style Icons/Image drawers and other MWB stuff. (AB)

^ * V1796 M/U INTERFACE V2.3 (2)
An object oriented system to create and maintain graphical user interfaces. From a programmers point of view, using MUI saves a lot of time and makes life easier.

^ * V1786 MAGIC MENU V1.29
Replaces all Intuition menus, supporting both pull down and pop up menus. Menus can be displayed in either the Standard look, or the modern AmigaOS 2.0 style 3D Look, and controlled exclusively using the keyboard.

^ * V1747 MAGIC BACKGROUNDS
This package is a patch to MAGIC W/B, the 8 bitplanes XEN Icons have been converted to 3 bitplanes icons which will take less CHIP RAM in your system.

^ + V1746 MAGIC W/B BASED ICON
These are the XEN approved down scaled and dot edited MWB Icons for use on non interlaced workbenches with a 1x2 pixel aspect. By Eric van Veldhoven.

^ ^ V1731 FUNNY B/G & ICONS
72 Backgrounds for MAGIC W/B Very funny. You should at least have had a look at it!

^ + V1729 CREATIVE ICONS V1.0
A sample bunch of Drive icons, Dock icons (usable with e.g. Tool manager or as Tool icons), default icons for use with the what is.library package and more. These are reflecting the style of the Magic Workbench.

^ + V1479 NEXT GENERATION WORKBENCH (AB)
Powers up the Workbench photons and ready's your system for the Star Trek experiences. ie sounds, pictures etc. Put together by Gary Burdekin.

^ ^ V1221 (AGA) BLANKERS
Blitz Blaser 1.01 Well, yet another screen blanker. But this one has the following features: AGA compatible.

^ + V1588 MWB EXTRAS 1 (AB)
Many, many icons for the use of MWB 2.0. These icons enhance your workbench by using a special colour scheme and by adding new fonts to your WB as well.

^ * V1605 MWB EXTRAS 2 (AB)
all the types of icons for use with Magic Workbench.

^ * V1607 MWB EXTRAS 3 (AB)
all the types of icons for use with Magic Workbench.

^ ^ V1021 W/B 3.0 SCREENS
Enhance your workbench disks backgrounds with theses nice full colour pictures.

^ + V0942 SCREEN BLANKERS
A Disk packed with screen blankers which includes Twilight Zone which is quite excellent and the nearest thing to the popular Mac screen saver After dark.

^ + V1512 256 COLOUR ICONS
This disk is full of lovely colourful icons for use in WB3 only as they are 256 colour images. There are draws, tools and project types. Not for children.

^ * V1043 SUPER DARK V2.1A
A screen blanker with some special features. It is similar to the After Dark screen blanker in the PC and Mac worlds. Features include a lot of different screen effects, a screen locker, and more.?

^ * V1134 TOOL MANAGER V2.1(2)
This part contains LHA archives of the binary files and graphics. Part 2can be found on disk number 873. Tool Manager is a full featured program for either WorkBench or CLI tool management. Includes the ability to add menuitems to the 2.x OToolsO menu, ad.

^ + V1893 MAGIC W/B STYLE ICONS
release of MAGIC W/B style icons & Tool manager anibrushes and image drawers to enhance WB.

^ + V1894 MISC PATTERNS/MWB
The size of the patterns is 720*566 in 8 colours Standard MWB2.0 palette. The Patterns includes: Landscapes, Stones, Chessboard, and Yoda.

^ * V1896 EXTRA INFO V1.0
is a replacement for the Workbench Information function, and adds a great deal of functionality on top.

^ + V1902 MAKE ICONS
Create any kind of icons use default icons use patterns & ALL argument change Default Tool of project icons change icons image, new icons imbediately on the WB

^ + V1908 TYPEFACE
is an editor for Amiga bitmap fonts. DOS2.0+ & bgui.library (included) are req. Source (in C) included.

^ + V1917 RO V1.03
is a new intuition controlled, fully user configurable file manager for OS 2.04 and newer. RO's mighty features will assist & help your daily work with your Amiga.

^ + V1929 NEWICONS IN STYLE
This is a set of icons for the NewIcons Package, which contains mainly icons for the standard workbench plus some extras. The icons are drawn in a new style, which you really will love (I hope). Also the brushes for all icons are included, so you can easily create new icons in the same style, or do whatever else you want.

^ + V1964 COLOUR WORKBENCH
Allows you to basically change your workbench screen to purple or whatever colour you fancy. It also changes the font from the usual workbench one to one that is really small. There are icons which allow you to change the one's you already use to some they have. They have also included some backdrops for you to use.

^ + V1968 STAR TREK BACKGROUNDS
Heres some new backgrounds for workbench all based around the Star trek T.N.G series.

EMULATORS

!+ V0817 A500 PLUS EMULATOR
Have amiga 500 and want workbench 2.0 then just install this disk onto your floppy 1.3 version of workbench or your HD for complete WB2 compatibility.

^ * V1900 FRODO V1.7
Frodo is a multitasking freeware C64 emulator for the Amiga. OS2.1 and a 68020 (or better) are required, as well as copies of the original C64 ROMs.

^ * V1178 KICKSTART 3 EMU
Kickstart 1.3/3.0 emulator and decibel patch program will give you the option to have kickstart 1.3 or 3.x(as used in NEW Amigas) in your Amiga. This is much enhanced over the version that was given away free.

^ + V1336 THE BBC EMULATOR
Contains commands to allow existing files to be transferred from a BBC with DFS by means of a serial cable.

^ + V1659 MSDOS/AMIGADOS V2.3
This is a very interesting utility which should be useful to anyone who uses both PCs and Amigas. The tool allows you to create a directory on which you can store MSDOS commands and then they can be used through the shell as if they were AmigaDos commands. Great.

^ ^ V1868 PC TASK V3.1
is the first and only software 80286 emulator for the Amiga range of computers. Transfer files between your Amiga and MSDOS. Compatible with MS Windows 3+

^ ^ V1931 ZXAM v2.0
The latest Spectrum Emulator available. Basically it allows you to run Spectrum software on your Amiga. Requires the AGA chipset but does require WB3+ and a 68020 CPU or better

OFFICE & PRINT

^ + V0575 HOME BUSINESS PACK (6)
QED, Text editor. Text Plus 2.2E, Word Processor, AZSpell, Spell Checker & Dictionary. BBase, A Database program. DATA EASY, Another database. BizCalc, Loan calc. LCD, Calc. SPREAD, Spreadsheet. Budget, Personal Finance. UNITS, Various conversions. CLERK, Small business accounts. SUPERDUPER, FLASHERCOPY, Copier's. TYPIST, Typing Tutor. DOOTX, Virus Killer. SYSINFO, System analyser. DOSMANAGER, Directory program. FONTLIST, FONT MANAGER, Utilities. PRINT STUDIO, Printing Tools. (6 disks)

^ + V1114 PRINT LABELS UTLS
Includes various programs like DOC DUMP v2.1, ENVELOPE PRINT v1.20, INLAY MAKER v1.4, MC MASTER v1.1, BANNER v1.0, LABEL PRINT

^ + V1279 PRINT A CARD
Want to print a business card or any other type of card then this is the software for you.

^ + V1222 PANASONIC STUDIO
The PanaPlus driver is a software for controlling printers with the Commodore Amiga personal computer.

^ + V1236 INVOICE PRINTER
invoice printing that we help aid any small business.

^ + V0928 LITTLE OFFICE
Its the all rounder do everything, all knowing, all seeing?? Well lets just say its very good.

^ + V1179 FILE-O-FAX
was designed to enable computer operators to be able to work at their leisure without worrying about forgetting those important meetings,what they had to do on any particular day or locating business colleagues tele no's.

^ + V1467 AWARD CONSTRUCT
A very handy tool for creating your very own awards and certificates. There are many styles, fonts and graphics to choose from, could also be used to make small posters, signs or leaflets. Easy to use and very effective.

^ + V1069 PRINTER DRIVERS HP
Deskjet 550 colour driver, Deskjet 500, Deskjet 500c, Ricoh HP1200 400dpi, Canon LBP, Canon BJ300, BJ130, BJ10e, Canon_48, Canon PJ 1080a, HP Paintjet.

^ + V1278 MAIL-O-DEX
An excellent way to keep names, addresses, Phone numbers, comments etc and then print out labels loads of them in 1,2,3 and 4 columns.

^ + V1044 FANCY PRINTING
BANNER v1.4, GRAPH PAPER v1.2, DISK PRINT

^ + V1357 CITIZEN MANAGER
The Citizen Print Manager has been designed in conjunction with Irsesoft.

^ * V1051 EASY CALC PLUS
is a spreadsheet designed to be both easy to use and fast. If the program looks nice, that wouldn't to be bad either. Unlike other software where the author writes the program first, then bolts on a help system, I have designed the help into the program from the beginning.

^ + V1184 AMIGA DIARY
Amiga Diary is a mouse driven diary capable of storing all personal events and the perfect solution to all those forgotten birthdays, missed appointments etc.

^ + V0366 600 BUSINESS LETTERS
Over 600 Standard business letters on this disk. Can be used as they are or insert parts into your own letters

^ + V0782 FORMS UNLIMITED
Designed to help you design and print different forms. There are a wide number of options and controls which allow you to draw simple boxes, lines, etc in order to create forms for many different purposes. Good.

^ + V0390 AMIGA FOX DTP
The first amiga PD Desk Top Publishing program. Excludes various extra features over the old Word processor, Text Editor, Graphics editor and loads more.

^ + V1680 AWARD MAKER 2
This is a very good tool for the creation and printing of Awards and certificates. There are hundreds of types to choose from then you can choose a font a border and also some of the text etc. Very good results.

^ + V1751 PRINTER DRIVERS
CANON600 v2.0: EPSON FX 850 v1.0 & LX 800, HP4DRIVER v35.8, HP4LSETTER v2.01

^ + V1858 DB V2.5
Small/fast database program that I wrote after having tested numerous other PD database programs and always found something lacking or irritating me. They might have dozens of features not found in db, but they lacked font sensitivity and a standard GUI look & 3.0

^ + V1862 INVOICE DATABASE V2
Intra is a rather simple, but therefore easy to use database program that was especially designed to deal with invoice information. Everybody, as we like it

^ + V1865 LEGAL FORM GENERATR
Generates custom do it yourself legal forms. Database includes forms useful for EVERYONE, plus specialised forms for real estate, small businesses, landlords, employers, etc. Can save you THOUSANDS.

^ + V1989 TELEPHONE BOOK V3.2
This is simply a program that allows you to type in all your mates phone numbers, names and address and store them in al smart little database. It can come in very usefull if you have a hard drive.

^ + V1990 GAS TRICK 2
This is the follow up to the first one but a bit better. It is exactly the same as the first one but the default values can be reconfigured at any time. the keyboard now has full function and the mouse clicking part is improved.

^ + V1992 BANK MANAGER V1.4.2
The latest version of Bank Manager has all the same features as the other versions. If you have already got any of the other copies this is just an update. It allows you to type in all your accounts & bank details you need.

^ + V1995 BEGINNERS TYPING TUTOR
This is by far the best typing tutor for years I have seen on the Amiga. It is worth every single penny. It consists of two games, one is called the letter game and the other one is called the word game. On the word game you have to type a word in before the timer runs out. A must for all types.

^ + V2003 REM DATE V2.0
Rem Date is a calender, reminder and filesofax all in one. I found it quite good to use and would definetly buy the registered version which is availble from the author.

^ + V2019 TEXT ENGINE v3.0
Allows you to make your every own letters and documents then print or store then on disc.

3D & GRAPHICS

^ + V1247 TEXTURE MAPS (ABC)
A collection of textures for use with the any program that will take high res textures.

^ ^ V1554 IMAGINE BUDDY (AB)
Here's some features of the new interface: Draggable and Sizeable text and index windows. Button Gadgets for the Search and Move functions Improved Searching The text is now positioned at matching hypertext links and all matches are highlighted for visibility.

^ * V1229 MAIN ACTOR V1.53
This is an all round animation utility that will create, playback, time and edit animations of any length or format (including graphics cards). Very good. (AB)

^ * V1811 IMAGESTUDIO V2.0 (AB)
is written for the casual graphics user who wishes to convert or manipulate various graphics formats on a modest Amiga system. There are several commercial offerings available, however the casual user is paying a lot of money for many facilities and options they would probably never use.

^ + V1889 3D OBJECTS FOR LIGHTWAVE WITH BITMAPS
486 module, Airbrush, Artbrush, Candle, Candleflame, CDreal!, chainring, laserprinter, laser printer tray, Paper tray for laser printer, monitor1960, padlock, phonepole, skydome, streetlight, streetlightbeam.

^ * V1891 IMAGEDESK V1.6
is a program to catalog picture directories by generating small representants of the pictures, so called thumbnails.

^ + V1907 POVRAY RAYTRACER
Renders in a window on a public screen (even Workbench) with colour sharing. simple HAM/HAM8 support autodetects Cybergfx Screen and renders in direct Colour (15/16/24Bit) if possible.

^ + V1916 XFIG V1.2
This is an Amiga port of an X11 structural drawing tool that lets the user interactively create and manipulate on objects such as lines/circles rectangles/splines/text and other elements. Xfig can produce output in several different formats: Encapsulated PostScript, IBMGL (HP/GL), Pic, PiCTeX, LaTeX, box, epic, eepic, eepicemu, textyl, tpic, X11 Bitmap, X11 Pixmap and gif

^ + V1922 REAL 3D V2.X OBJECTS
Objects are pretty large in size, especially the 4 cylinder engine, you might run out of memory pretty fast. My Amiga 4000/030 + FPU is now equipped with 18MB RAM, and I can now raytrace all of my objects.

^ + V1925 SPACEDOCK STATION
* 1.3Mb, so you'll need a healthy chunk of memory. * No Slicing was used in modelling, to keep things as small as possible. * Space Doors open using the new States function. * Marquee of Space Door lights.

COMMS

Why not check out our BBS support lines (0181) 2510078 call The MYTH & MAGIC BBS

^ * V1745 TERM V4.2 [030]
latest version of this very well known comms terminal program. Version 4 has even more features and although it is not for beginners it is probably the best available.

^ + V0979 NCOMM V3.0
Is a comms program based on Comm v1.34 with lots of very nice enhancements. Has new functions over v2.0

^ * V1722 AMIGA TO PSION S3/A
is a implementation of the Psion link protocol which is e.g. built into the Psion S3/S3a ROM. It's main purpose is to provide vice versa nfs like file access.

^ + V1852 FINALFAX 95
This is one of those arexx macros which are very handy for automating the more tedious jobs on your Amiga. This one allows you to select options for GPFax from within Final Writer. That means that there is no need to switch from Final Writer to Workbench.

EDUCATION

^ + V1079 KEYBOARD TRAINER
This program only concentrates on basic keyboard skills, and is in effect, still a Beta Version, I think you will find it a vast improvement on most so called tutors.

^ + V0793 AMIGA BEGINNER
You asked for it! A tutorial for the beginner on using your amiga! Covers the CLI and Workbench, its great for learning about the Amiga. Also contains numerous beautiful 16 colour icons for WB v2.04.

^ + V1845 DPAINT 4 BUDDY (AB)
Will teach you how to use Dpaint 4. It works by running along side the well known paint package providing hands on demonstrations of the various features. It is a very good way of learning a program so you want to learn DPaint then this System is one of the best ways.

^ + V1881 AMIGATRAINER
very powerful & flexible program to learn foreign languages. You enter the words yourself, so they aren't related to any special language, school or book. every word there are 2 additions to enter.

^ ^ V1897 GEOGRAPHICAL ATLAS
AmiGlobe is a geographical atlas that allows you to navigate in the world map, zooming everywhere, get country data, etc. Requires 2Mb of RAM. (AB)

MUSIC

^ + V1269 THE OCTAMED TUTOR
Welcome to the Octamed Tutor, a simple guide through the basics of this excellent music program.

^ + V1207 OCTASTUFF
Welcome to OctaStuff, a disk based around work with OctaMED 3 and 4.

^ + V1882 ART OF NOISE TRACKER
NEW tracker, NO ProTracker Clone!, 8 channels, fm synthesis, drum sequencer, wave table synthesis.

^ + V1904 MUSIC MANI V2.12
is a database program that manages ALL your CDs, MCs, LPs and Singles in a VERY comfortable way!

^ + V1913 SOUND CONVERTER
A new sound effect,sample converter,sample generator software with : more than 50 effects converts many formats (IFF 8SVX,IFF 16SV,RAW,RIFF WAV,VOC, SUN/NEXT,AIFF/AIFC,...) * you can work with many samples (every sample has it's own sizeable window).

^ * V1981 SOND BOX V1.97
This tool converts RAW, IFF, VOC, WAVE, AIFF, MAUD and Maestro samples into each other format. Additionally, some effects are available to e.g. optimize the sample or amplify it to maximum volume.

^ + V1991 END OF TIME & SPACE
This disk contains four music modules. The first two are quite good but the second two are not that good. If you are into this sort of thing this is worth getting, but otherwise it's not that good.

^ + V1993 PH KARAOKE
This disk if you already hadn't guessed is a Karaoke disk that allows you to play your favourite songs with the words coming on the screen aswell. This is quite a good and adictive utility.

TIPs, CHEATS & RELATED

^ + V1416 EYE OF THE BEHOLDERS
This disk contains a selection of utilities and software for Eye of the Beholder II, like end of level saved game file, Eye of Beholder 2 special quests explanation, EOB2 Character Editor, Eye of the Beholder Solution, GIF pictures of all 12 levels in Eye of the Beholder.

^ + V1363 RPG. ASSISTANT
AD&D play time dungeon master's assistant. The version you see here is a pre release of the program in AmigaBASIC. Right now it will take characters in a text file and load them in to be displayed at will. It also rolls dice and has a handy dandy encounter screen that will keep track of monsters & their current HPs

^ ^ V1687 (AGA) FIXES VOL 1
This program disk will help AGA machine users get some added compatibility out of their older software. Don't forget many supposedly incompatible programs will work on the AGA machines by suitable adjustment of the boot options. (Hold down both mouse buttons).

^ + V1773 ACTION REPLAY CHEAT
This disk has on it a text file which contains loads of codes for those people who have action replay devices. There are cheats for hundreds of games. Good.

^ + V1848 DIY REKO
This disk has on it an Arexx macro which, when used in conjunction with ImageFX, will make reko cardsets for Klondike AGA almost automatically. Also included is a detailed Amiga Guide document explaining everything.

^ + V1468 GAMES HD INSTALL
This disk provides you with the software needed to install certain games onto your A1200. The games that this disk can install are BodyBlows, Goal, Lemmings 2, Superfrog, and Walker. Could be very useful.

^ + V1662 HD GAMES INSTALLER 2
Contains a variety of hard disk installer's for a few well known commercial games. These games are as follows: AlienBreed 2 AGA, Jungle Strike, Assassin (Special Edition), Body Blows, Goal, Ishar 2, Zool 2 AGA, Ruff and Tumble, Body Blows 2 AGA, StarDust, Super Frog, Walker, Rise of the Robots, Bubble and Squeak, ElfMania, Aladdin AGA and Motal Kombat 2. Great.

^ + V1885 NEW HD INSTALL
Hard Drive Install scripts for 3 games. Beneath a steel sky Flashback King's Quest VI. New updated version (small bugs fixed from last version).

^ + V1988 DUNGEON MAPPER V0.3
This is the first version of something called Dungeon Mapper. It will work on Workbench 2+. It allows you to design your own maps for games like Dungeons and Dragons which can be very useful. It also has Tetris on it if you boot it from Workbench.

^ + V1994 CHEATS COMPILATION
This disk is a demo which gives you a taster of what you can have if you buy the registered version. The demo gives you a choice of about 15 games to chose from. T

VIDEO

^ + V1196 DESKTOP VIDEO
Dot Matrix Stroller. Is a video titling program intended for use in adding scrolling captions to video's. Flood Effect loads an IFF picture and displays it with a Oflood effectO so that it floods the screen.

^ + V1418 THE COMPLETE VIDEO TEST SYSTEM (AB)
is a collection of 20 test patterns (displayable with any IFF animation viewer) that can be used to evaluate monitors, TV sets, VCRs, and other NTSC video equipment. CVTS is easy to use, with the documentation presented in clear, non technical language. The tests are unique.

^ * V1156 VIDEO TITLER
Generates professional looking TV titles and credits for your own video's.Outstanding abilities are very smooth scrolling, colour slides (AGA support)and usage of colour fonts. Limited demo version only.

GAMES

^ ^ 4431 BEST AGA TETRIS
Best permanent tetris, graphics, musics, 100% assembler

^ + 4434 BLACKDAWN v2.1
3-level Dungeon Master style Alien Breed:- charge around the maze levels, shoot lots of aliens, find the lift & move on. but do it in 1st person perspective view.

^ + 4442 SCORCHED TANKS V1.85
The awesome artillery tank game. This one contains loads of goodies like 70 weapons and 13 shield types as well as new goodies.

^ ^ 4449 PSSST
This is a 1990's version of the old Spectrum Cla… PSSST Main features include: - 256 Colours. - Real Ti… frame rate. - No C code !!!! (I Hate C) - Nice … game sequence. - Three Levels of play (Slow, Norm… TURBO NUTTER), No Spam.

^ + 4451 LAST LAP
is a car game for one or two players. It is excellent … two player mode. There are about 10+ different tra… for you to race around. Some of them are quite tasy … the start but as you go on they get a lot harder. On … tracks they have these squares which if you drive over … shoots you on even faster they you are already going.

^ + 4452 SPELL TRIS
Tetris style game but the main difference is you are … ters instead of just shapes.

^ +4454 BATTLE TRUCKS
is a one or two player game in which you choose yo… own track and then buy it. You can add nitros, … motors or even buy a brand new truck with your wi… nings from your races.

^ ^ 4457 SCREECH V1.5
This demo aims offers you the opportunity to run a… thing smaller than your car ever! Improved graphics … on the way (whooper)!. Req 020's with 1MB chip … and .5MB fast ram or 030's with 1MB chip ram or 700… chip ram and 300 kb fast RAM.

^ + 4459 SUPER EARTH DEFENSE V1.5
is a classical shooting game.

^ + 4462 XASTEROIDS
This is a 'port' of xasteroids, an X11 application. … X11 server (DaggeX or others) is needed to run the pr… gram! This program is using libX11 by Terje Pedersen… You don't need this either since it is a link library tha… compiled into the binary.

^ + 4463 BOULDERDASH 64
A complete OS-friendly (multitasking) Boulder Da… with C64 graphics and sounds. 68020+, AGA … (DblNTSC required), KS V39, asl.libra… powerpacker.library. Smooth scrolling 1275(!) origi… C64 levels/sounds, Cheats, Joystick and keyboard co… trol, User definable games and levels, two player game.

^ + 4464 BREAKIN' BRIKS V1.0
Great version of the very cool Breakout type game. F… AGA Amigas only. Works with 2Mb CHIP memory! … Improved performance with FAST mem. Great GFX.

^ + 4465 CHAMPIONSHIP MANAGER EDITOR V2.4 68020+
This is the first public release of Championship Manag… Editor (CmEd). It was written because we had played … game to death and were looking for a way of putti… some interest back into game.

^ ^ 4466 DPACMAN AGA
15 levels and 5 bonus levels. The registered version h… 50 levels and 15 bonus levels and extra gfx and oth… improvements. Features: Can use external Protrack… modules and XPK for packed modules.

^ + 4467 JOUSTER 3
If you haven't heard of the good old favorite, Joust, … you're a pretty young or fairly old dude.) Anyway, th… game brings Joust to the Amiga and also has impro… ments such as powerups, etc. You can even have a pte… dactyl as a steed. For 1 or 2 players. Check it out.

^ + 4468 PATCH LEMMINGS 2 TO RUN FROM HD
Patch to allow Lemmings2 to run from hard drive.

^ + 4469 CRITICAL HIT
is a highly detailed fantasy combat game, which … ates tabletop war gaming on the Amiga (requires 1 M… RAM). A strategic war game with excellent graphics, … D landscapes and a wide variety of fantasy combat … ures and scenery - Campaign and map designer.

^ + 4470 PANIC SOCIETY V1.1
Hillery & her friends have taken total control of … world. as one of some 10 million people left, scienti… for transfering to the country of your origin. But, … one has tampered with your environmental control … ing you to awaken from a mind controlled state.

^ + 4471 BRATWURST
A Roketz-like game for two to four players. Automa… zoom keeps all players in view in the least possible … vector graphics.

^ + 4472 CULTURE TANK
A single screen tank combat game with up to 6 tank… which may be human or computer controlled. Team … all-against-all modes. 3 types of weapon including … siles and flamethrowers.

^ + 4473 TURBO LIGHT CYCLES
3 player 'Tron' game, with editor. By Vaughan Roberts.

^ + 4477 WIZZYS QUEST
is the best PD platform/puzzle game I have EVE… played, so despite its bugginess (see below) I thought … upload it to Aminet. Wizzys Quest has 50 levels, getti… progressively harder.

^ + 4478 BIACCOARCHIVE! V1.0
Nibbler arcade clone by Maurizio Facca.

^ + 4479 BOB THE AMAZING LEMON
Amazing Pac Man clone which features a level … changeable music and many different wall and flo… types including appearing walls, ice and water.

^ + 4484 REBELLION
is a very good shoot em up. You are a little spaceship which travells around space trying to pick up little ali… and destroying all the missles that are coming at you.

^ + 4485 LEGEND POUNDS ISLAND
Here we have an adventure game. Half graphical, ha… text based this game is played almost entirely using … mouse. There are no sprites, just backdrops with obje… to examine or use.

^ + 4486 MASH
An excellent game. You choose to control either a Sp… (a potato on legs!) or a Tank. You then need to tackle … whole load of obstacles in order to get the enemy on … other side. Great graphics, great sound an allround cla… game. Superb.

^ + 4488 PSYCHEUAL
An Alien Breed clone. You are a bloke with a machi… gun who has to run about each level shooting other pe… ple and aliens. The level graphics are good and show … lot of detail plus the gameplay is not too easy either.

NEW TITLES

^ + V2038 BARFLY v1.27
Assembler Development System

^ + V2039 PHXASS v4.23
68xxx Macro Assembler

^ + V2040 SW CHEAT v4.5
Over 950+ game hints/cheats.

^ + V2041 F1GP Ed v3.03
Formula One Grand Prix / WC Editor & F1GP-Ed … english translation files & Track data for GPDisplay

^ + V2042 RAY STORM v1.11
Fast raytracer with many features

^ + V2043 CARD HOUSE v1.1a
Make card houses/castles with Imagine

^ * V2044 EGST v5.4
EGS animation,framegrabber&handyscanner

^ ^ V2045 ICONIAN v2.96
OS3.0 icon editor, NewIcon support.

^ + V2046 SPLATTER PT v1.67
Awesome paint program has a PAL mod

^ + V2047 SVIEW v5.10
SuperView V5.10 + Library 12.2

^ + V2048 CALC
Arbitrary precision calculator/language

^ + 4552 HEROED v2.1
Amiga version of the classic C-64 H.E.R

^ + 4553 MANG FEND ACE
Pete Stoneskij's full version: combat

^ + 4554 BLOODFEL (AB)
Captive & HiredGuns style 3d adventure

^ + 4556 ZHANDULIN HELMI
Finnish textadventure with some graph

^ + 4557 POWEROIDS v1.2
Multitasking Asteroids, raytraced gfx, 1

CODE REFERENCES

^+ Works on all machines
** Req Workbench 2.0 or above
^^ Req Workbench 3.0 or above
(ABC) Product has ABC disk (ie. three)

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3D Objects Volume 1

CODE: CD232 PRICE: £9.99 +.75p P&P
STATUS: (New Release) Janurary 1996
A comprehensive Library of 3d objects for Imagine & Lightware to enhance any graphic artists

Largest selection of Objects for Imagine and Lightwave users.

All the objects you need assembled together on one convenient CD

The 3d objects CDROM is the ideal collection of 3d graphical objects for both the most popular 3d graphical platforms. This disk has over 600Mb of pure objects in both Imagine and Lightware formats.

* Imagine users get 3d objects in the following catagries:-

ANATOMY	14.3Mb
ANIMALS	11Mb
AUTHORS	10Mb
AVIATION	11.5Mb
BATHROOM	1Mb
BOTANY	1.3Mb
BUILDING	5Mb
CLOCKS	1Mb
COMPUTERS	3Mb
D&D	1Mb
DR WHO	1Mb
EFFECTS	1Mb
FOOD	3Mb
FLYING	1Mb
FRUIT	.2Mb
FURNTIRE	4Mb
GENERAL	.4Mb
HOUSEHLOD	9Mb
HUMAN	7Mb
INSTRUMENT	2.7Mb
KITCHEN	1Mb
LAMPS	2Mb
LAND	1.7Mb
LOGOS	1.2Mb
MISC	16Mb
MORPH	5Mb
MUSIC	1.5Mb
NOVELTY	3Mb
ORGANIC	3Mb
PHONES	2Mb
ROBOTS	2Mb
SCENES & SCI-FI	3.4Mb
SHIPS	4Mb
SPACE	42Mb
SPACE SHIP	11Mb
SPORTS	1.9Mb
STAR TREK	10Mb
TECHNLGY	2Mb
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TOYS	3Mb
TYPE FACE	34Mb
VEHICLES	25Mb
VIDEO	1.3Mb
VISTA	.4Mb
WEAPONS	2.5Mb

Enhance your objects collection with just one disc

* Lightware users get 3d objects in the following catagries:-

ANATOMY	7.7Mb
ANIMALS	10Mb
AVIATION	12Mb
BUILDING	17Mb
COMPUTER	2.7Mb
EFFECTS	1.8Mb
ENVIROMN	1.0Mb
FONTS	7.6Mb
HOLIDAYS	3.1Mb
HOUSEHLD	7.5Mb
MISC	8.5Mb
MUSIC	3.6Mb
ORGANIC	20Mb
ROBOTS	5.2Mb
SHIPS	11Mb
SPACE	580Mb
SPORTS	2.6Mb
STARTREK	8.2Mb
TECHNLGY	9.2Mb
TOOLS	7.6Mb
TOYS	3.7Mb
TRANSPRT	15Mb
WEAPONS	3.3Mb

* *Professional* - Also included are collection of objects from some of the best graphical 3 dimensional graphic artist's amund.

P&P 75p PER TITLE

PRICE MATCH
WE WILL MATCH / BEAT ANY OTHER ADVERTS PRICE FOR ANY OF THESE CDROM'S

Amiga Utilities 2

CODE: CD201
PRICE: £19.99+.75p
STATUS: Feb 96
Double Disc Set An entire library of utilities in all catagies for the Amiga.

Is our complete classic Amiga Various disk collection. This is the 2nd volume to be release on CDROM. (Previously on 1,500 floppy disks only in DMS format only).

You'll be sorted with Amiga Utilities 2?
You'll get software from all aspects of the Amiga. Technical section, Artwork in Black & White and Colour, all 2,000 of our Now Famous Various floppy disk library.

Utilities on the disc

- Anti Virus
- Workbench 2.0
- Clocks
- Calendars
- Copy and Delete
- Dir View
- File Finders
- File Changer's
- Comparisons
- Disk copies
- Keyboarding
- Mouse Utils
- Enhancements
- Editors
- Menu systems
- Security
- Workbench 3.0
- Astrology
- Magazines
- Communications
- Business
- Emulator's
- Books
- Printing
- Archivers
- Cataloguing Utilities
- Desktop calculators
- Telephone utils
- Directory
- Disk utils
- File Viewers
- Help
- File Copies
- Hard Drive utils
- Educational
- System
- Emulator's
- 4Dos Utils
- C.A.D Systems
- Video Utils
- Magic Workbench
- Game Cheats
- Stereograms
- Desktop Publishing
- Gambling
- Genealogy
- Video
- and a hole lot more!.

New Double disc version

*** New Menu system**
An excellent menu system which can view and unpack all the lha files from the CDROM to your hard drive.

*** New 'Search' Functions**
To search for all the Workbench titles just click on the search button and text workbench and all the disks will be displayed.

*** New Workbench enviroment**
Excellent ready-to-run Amiga Workbench has been provided on the disc for easy use.

*** Over 550 New Disks**
550 new disks since Utilities 1-1500 was released.

*** Restyled, Remastered**
New help and information files, restyled artwork! Updated information, Catalogue of New CDROM's and contains the latest software right upto late December 1995.

*** Greatest & latest** Utilities from October '91 to December '95: Utilities, and loads more (see above).

Enhance your Amiga with powerful applications carefully sorted through-out our many years.

Our Menu system will help install any of the utilities to any device/drive on your system. Will unlha/view any file.

Supports All Amiga computers 1.2 to 4.0
Minimum Req Amiga A500, CDROM Drive and 1Mb of memory. Recommended 2Mb A1200 for all utilities to work.

The AGA Experience

CODE: CD210
PRICE: £18.99
The Best Selection of AGA Software anywhere - The AGA Experience

NFA - Famous for their 'Word' diskmag, and Bodyshop slideshows amongst others, are very proud to present their first Amiga CD-ROM disc - This is the first CD dedicated to AGA owners, and features the very best AGA-only software released over the past 3 years.

EXCLUSIVE NFA - These quality titles were created by leading Amiga group NFA specifically for this CD. These titles include AGA Slideshows, Klondike cardsets and others. The CD features every AGA NFA release to date, including the brilliant 'Word' diskmag, 'Out of Space' Alien multimedia disk mags.

READY-TO-RUN - Most of the contents run straight from the CD. There is no need to spend ages extracting disks. Well over 300meg of ready-to-run hot utilities, disk mags, text files, demos, games and much more. Only those titles which NEED to be compressed have been, these include Demos and slideshows which have to be stored in DMS format. Extracting these is as simple as double-clicking an icon in Workbench.

MAGIC WORKBENCH - Colour scheme and icons. We have spent months making this CD the very smartest looking CD available today. Almost every program has a suitable MagicWB icon. We have even created custom Ray-Traced icons for the CD, any Amiga owner is guaranteed to be impressed!.

LATEST AGA - Mega-demos. If you like being impressed by your Amiga, you'll find a great selection of demos. There are many which are so new,that you won't have even heard of them

C64 Sensations

CODE: CD181
PRICE: £17.99 +.75p
STATUS: In Stock
Remember the good Days - Contains all the Software that we have collected during our great times on the C64. Dating from 1984 up to the present day.

Surprising as it may seem to a lot of people there is still a lively C64 scene today. Although very different from a few years ago there are still a lot of people still heavily into the 64. And the rest of you, like us, have a lot of great memories.

That is one of the reasons why we compiled this CD. So anytime we want to reminisce the old days you can just pull out the CD.

We garuantee you! that you will not have seen many of these amazing Mega demos as a high amount have not been releases before.

Amiga - Contains Amiga tools to be used for copying & converting the .D64 images back to your 1541 or into your Amiga. Also included is the FULL version of A64 Emulator Package.

Demos - This directory contains our entire C64 Demos collection. They date back from around 1986 until April of 1995. There are literally thousands of demos and magazines. Oh the fun I had looking over my old demos and reading charts in 5 year old magazines. The collection is as complete as it could be for someone mail trading for years.

Sid Tunes - Hundreds of Sid Player tunes. All the tunes are in Amiga Playsid format BUT have all been renamed with PC SidPlayer file extensions so they are runable on a PC as well. They are also runable through PlaySid. The latest versions of which is also on the disc are provided in the relevant Tools directories.

Hottest 6

CODE: CD200
PRICE: £14.99
More than 400Mb of brand new programs and over 750 new floppy disks.

The latest Public Domain and shareware software from March 1995 to December 1995.

Whats New on Hottest 6

Now comes complete with an easy to use menu system. The Menu is very easy to use point and click operation with a GUI to Perform the Uncompaction of the cdrom for you (DMS or LHA supported).

300 New Utility disks

- Sounds
- Pictures
- Fonts
- Graphics
- Utilities
- Virus
- Emulators
- Fractals
- Printing
- Business
- Prediction
- MED
- Amos
- Workbench
- Modem
- 3D
- Instruments
- Clip Art
- DPaint
- Music
- Workbench
- Killers
- Hobbies
- Printers
- Game
- Animation
- Hard Drive
- Octamed
- Cheats
- Objects
- Virus Killers
- Art Related
- Modules
- Educational
- Busness
- Hard Drive
- Comms
- Video
- Programming
- Databases
- Sound
- Home
- CDROM
- Design Work
- Demo Makers
- Degragers
- Programming
- Cad Software

300 New Library disks

- Games
- Mega Demo
- Demos
- Rave Demo
- Slide Shows
- Music Disks
- Collections
- Sampled
- Pictures
- Disk Magazines
- Animations
- Sounds etc.

100 New fred Fish Disks
The follow on to the most popular floppy disk library from fred Fish disks 1001 to 1100

The Colour Library

CODE: CD182
PRICE: £9.99
The image you need right now over 1,700 photos!

The superior images are divided up into various categories to aid selection.

The files may be "importable" into most of the popular DTP Packages, art packages, viewers & word processors directly from the CD.

We have included several useful utilities to enhance the performance of this disc.
Filly GIF - This allows you to view any of the images on this disc, prior to use.
Photovision - which is a full featured image manipulation and viewing tool.
Envision Publisher - is a top quality DTP

What Categories do you get:

- Animals
- Boats
- Cartoons
- Flags
- Flowers
- Houses
- Fantasy
- Inserts
- Modart
- Painting
- Raytrace
- Smartart
- Things
- Bikes
- Cars
- Cats
- Dogs
- Maps
- Men
- Sea
- Misc
- Space
- Places
- Scenic
- Ships
- Trains
- Buildings
- Birds
- Fish
- Dinosaur's
- Computers
- Helicopters
- Medical
- Military
- Star Trek
- Planes
- Sci-Fi
- Sports
- War

Also contains our menu system for easy use.

Aminet Set 1

CODE: CD112 PRICE: £24.99
Quite simply the best CD compilation around "CU Amiga"

What do you get:
Its a Quad Disc Set with the most comprehensive collection of Amiga software.

Dir	Size	Files	
dev	141Mb	800	Development.
util	103Mb	1,800	Utilities.
gfx	134Mb	900	Graphics.
pix	337Mb	1,100	Pictures & anims.
text	87Mb	500	Text Software.
docs	39Mb	400	Documents.
demo	336Mb	900	Demos.
game	160Mb	1,000	Games.
comm	86Mb	1,100	Communications.
hard	6Mb	100	Hardware related.
biz	63Mb	300	Business Software
disk	12Mb	200	Disk HD tools.
misc	109Mb	500	Miscellaneous.
mods	358Mb	2,700	Music Modules.
mus	29Mb	200	Music Software.

Aminet Set 2

CODE: CD220 PRICE: £24.99
Fast access to the wealth of the Aminet!

What do you get:
Its a Quad Disc Set with the most comprehensive contoined Amiga software collection to date.

Dir	Size	Files	
util	120Mb	1,000	Utilities.
docs	270Mb	870	Documents.
text	40Mb	210	Text Software.
biz	75Mb	170	Business Software
pix	630Mb	2,000	Pictures & anims.
gfx	170Mb	430	Graphics.
misc	150Mb	270	Miscellaneous.
demo	630Mb	2,000	Demos.
game	250Mb	530	Games.
dev	110Mb	340	Development.
disk	10Mb	110	Disk HD tools.
hard	5Mb	60	Hardware related.
comm	150Mb	1,000	Communications.
mus	30Mb	120	Music Software.

Aminet Series

CODE: (mixed) PRICE £12.99
The all round best cdrom collections - Aminet

Aminet 4 - CD064 - Mar '95
Aminet 6 - CD175 - Jun '95
Aminet 7 - CD184 - Aug '95
Aminet 8 - CD208 - Oct '95
Aminet 9 - CD238 - Dec '95
Aminet10 CD246 - Feb '95

Contains more ththan 1 gigabyte (uncompressed) of software in thousands of archives. Since the release of Aminet 7 CD more that 500Mb of new software has appeared. The current edition has a special focus on modules. More than 1.00 were included. Many modules are of a very high-quality and feature 8 voices. The excellent user-interface has also experienced further improvements.

CD Boot v2.0

CODE: CD117 PRICE: £24.99
CDBoot is a phantastic new product that enable you to use almost any CD32 games on an A1200 or A4000.

CDBoot enables you to automatically boot from bouting Cds (CD32) with a standard CD-ROM drive.

With the **CDBoot** CDROM you can create a configuration file for each CD, containing information on the Joypad emulation. You can also save the highscore of each CD32 game.

The Usage and installation of CDBoot is very easy, also for beginners, due to the excellent English manual.

Since the compatibility is very high, you can use more that 90% of CD32 games currently available. CDBoot is an excellent software solution for all Amiga Freaks, who would like to enter the world of CD32 game!.

F1-Licenceware

CODE: CD233 PRICE: £29.99
Sick of the run-of-the-mill old releases containg collections from pre-1995

The ***F1-Licenceware*** CD contains the complete collection of F1 titles from 1 to 100.

Over 100 titles or more than 200 disks!. This CD is worth well over £500, if the disks were bought separately. **There's something for everyone** on the CD - games, utilities, tools, professional clipart, music, beginners guides, educational programs and much more.

Some superb material is contained within this CDROM:

* ***Blackboard v3.0*** (image manipulation)
* ***Ultimate Quiz 2*** (general quiz), Word
* ***Plus Pro*** (originally valued at £15!)
* ***Fortress*** (strategy God game)
* ***Relics of Deldroneye*** (voted best PD game ever by Amiga Format)
* ***ERIC*** (voted second best PD game ever)
* ***Powerbase*** (database program)
* ***GRAC*** (superb Monkey Island' style adv game creator with 1000's of copies sold on floppy)
* **Introduction to Workbench** (Best Seller!)
* **Absolute Beginners Guide to AMOS**
* ***Junior Artist*** (kids paint package)
* ***Tots Time*** (one of many kids programs).

Commerical Software

Use some of the professional music within your games, with no extra charges.

What about the clipart for your DTP documents? AMOS programmers have a field day with this CD - AMOSzine, guide to AMOS and AMOS supplements.

Something for everyone. With a very easy to use AmigaGuide© interface with 80% of the programs running straight from the CD.

Remember that the programs are commercial, with copyright owned by F1.

All programmers receive a royalty for every CD sold.

Assassins Games 2

CODE: CD211 PRICE: £18.99
For the Ultimate Games Experience play with the Assassins!

The **Assassins Games 2** CD comprises of hundreds of the latest Public Domain and Shareware games for the CD32, CDTV, and Amiga range of computers.

All the games are accessed via the easy menu system. The Amiga guide document provided gives you easy access to the games instructions and its possible to play them direct from the Guide.

The Guide also provides compatibility note for certain games with your particular machine. Also included are over 70 workbench games ready to play from the workbench.

Fnnet and Sernet are also provided to allow access to the full contents of this compack disc on an Amiga with CD32/CDTV.

Over 18 products available upon request, call for details

ZOOM Release 2

CODE: CD234 PRICE: £18.99
The latest PD and the Latest CDROM from Active software Comes release 2!

If youwant the latest or greatest PD Software then look here! The CD contains well over 1,100 disks, over 640Mb's of data or 1.3 GIG's of Public domain.

New Search Routine
The Multi-tasking search/find will seek file names or numbers.

* Greatest & latest PD from October '94 to December '95: Utilities, Games, demos, Slide shows, Educational, Disk magazines, & more!.

NEW! - A selection of Active software Pro Packs
NEW! - All professional sound samples
NEW! - Over 22Mb of read-to-view/use magic Workbench icons etc.
NEW! - 100 Klondike/Card Games Deluxe sets

Global Amiga Experience

CODE: CD199 PRICE: £24.99
Test the best Amiga Software with many full versions.

Contain demoversions of commercially distributed software for the Amiga ***The Global Amiga Experience*** CDROM. The full Imagine program is a big plus. **AS57 "92% Star buy."**

What do you get:-
* ***Some of the examples of demo versions*** - Caligari 24, XiPaint 3.1, PPaint 6.3, Image FX 2.0, Photogenics 1.2, Bars & Pipes 2.5 etc.

8 Full versions
Scala 1.13, Imagine 2.0, VistaPro 1.0, Distant Suns 4.0, The Edge 1.721D, X-Copy, Clarissa 1.1, Steuerfuchs Pro '93.

"Its Great value for money" Amiga Shopper

This CDROM contains 530Mb of demo and full versions of commercially distributed Software.

Meeting Pearls 3

CODE: CD224 PRICE: £8.99
Germany's most popular Amiga CDROM has grown by a new addition!

What do you get:

3Mb	CD-ROM Utilities
9Mb	Games
35Mb	Graphic Programs
21Mb	Communications & Networking
5Mb	Debugging Tools
29Mb	Development Tools
13Mb	Floppy disk, Hard Disk, & SCSI
8Mb	Educational Programs
10Mb	Packers, Crunchers and Archivers
29Mb	Internet Movie Database, Updated
7Mb	Multi Tools and Programs
27Mb	Music Modules
12Mb	Music Programs and Software
21Mb	Pictures
13Mb	AmiTCP and more for Networking
60Mb	Documention, CD Databases, etc
96Mb	PasTeX v1.4 - Not released before/
15Mb	Utilities
30Mb	HTML-Pages.

Hottest 1, 2, 3 & 6 Set

CODE: CD240 PRICE: £29.99
More than 2,400Mb of Software from PDSoft's main library.

Quad Disc Set (4 Discs)

The Public Domain and shareware software on this disc dates from **Jan 1988** to **Dec 1995**. Thats our first 3 cdrom disks (not released before) and our latest release for less than a commerical game would cost.

All the disks have been packed with DMS to retain the original disk format and contents and it comes complete with an easy to use menu system.

The CD's Contain some of the best and most original Amiga Mega Demos, Games etc you will ever see.

Pro Clipart Volume 2

CODE: CD053 PRICE: £17.99
Come with a 250 Page Book

Is ***crammed full*** of clipart & related software. Every one from Juniors to adults will simply love flicking through the 250 page book selecting the pictures desired as you go, instead of loading a viewer

Directories such as Animals, boys, cultural images, floral and natural images, girls, holiday images, literary figures, mythological images, scenery, transportation, and work images. The disc contains drawings of bears, cats, dinosaurs, dogs, insects, horses. Cultural images from Egypt, Japan, Native Amer-icans, Polynesia, Persia are also included on the disc. Floral & natural images include blossoms, planets, sky, the sun, trees, and weather.

Network 2 Package

Code: CD235 Price: £39.99+£2.45
Get connected - CD32 to Amiga.

The ***Network Package*** & CDROM, **Wierd Science.**

*** Network CD 2 £14.99**
*** Sernet Cable £25.00**

* ***The Network 2 CD and Cable*** combination allows the connection of the **Cd32 or CDTV** (CDTV only to be purchabed with Network CD Vol 1 please Ask) to any Amiga. This connection enables a communications channel between the two machines, thus allowing the transfer of files from one machine to the other. Put simply you can gain access to the CDROM drive on the CD32 and use any of the normal CDROM titles within this ad.
File Transfer If you have a directory Utilities such as Directory Opus, Sid or DirWork the access to any CDROM's files is simple. (DirWork [Shareware] is currectly on the CD).

Postage & Packing by Recured Delivery **£2.45**

Eric Schwartz CD

CODE: CD229 PRICE: £24.99
Eric Schwartz needs no introduction to any Amiga Animation fan!

As you may have already gleaned from the title, this is a CD-ROM of pretty much the complete collection of pictures, animations and relat-edtiles by Eric W. Schwartz.

There are directories for animations, pictures, 3D object files, icon files, & more that hopefully will interest you. Also included is a special "Artists" section with material by other artists whom I've has come in contact with over the years. These artists you may have heard of, while others are new to this medium, but I'm sure you will enjoy all their work.

An Amiga Library Serives CDROM By Eric Schwartz and Fred Fish.

Content Warning

The Sound Library

CODE: CD101 PRICE: £19.99
Over 1,000Mb of the best quality Sound Files.

Its a Double Disc Set with the most comprehensive collection of sound related software to date.

What you do get:
* **MIDI** - files various formats.
* **Over 6,500** Music Modules.
* **Over 1,000** Music VOC Files.
* **Over 1,000** Music WAV Files.
* **Over 1,000** Music Samples.
* **Ready to Run** - 100's of Music reltaed software packages, Editors, Mixing, Converters, Sequencers, Drivers, Players, Trackers, etc.

Latest Whoop-it for windows, Drum Blaster, Tetra sequencer, Blaster Master, Windows sound utilities, Trak Blaster, Accu Music system, Multi Media Jukebox, Cinema, MOD4Win, Music Sculptor, Surfs UP, PC Drummer, and much, more.

Sci-Fi Sensations

CODE: CD207 PRICE: £18.99
Is an exciting new Double Disc Set Containing over 1000Mb of Science fiction related software.

The Sci-Fi Contains Images, Music, Animations, 3D objects (Imagine & Lightwave), Sound FX, Documents, Tunes, Information and Games.

Catories include:

- Babylon 5.
- Star Trek
- Deep Space 9
- Batman,
- Robocop
- Aliens, 2001
- Tron
- Thunder Birds,
- Next Generation
- Voyager
- Dr Who
- Bladerunner
- Battlestar Galaltics
- Total Recall etc.

All ready to run direct from the CD

Images, Games, Clipart, SCI-FI Fonts, Information, WallPaper, Stories, Music, Samples, 3D Objects, Game Graphics, Tools, and Animations in FLI, FLC, ANIM, Movies, AVI, Mov and MPEG formats.
* **NOT PART OF ANY SPECIAL OFFERS**

Turbocalc v2.1

CODE: CD218 PRICE: £9.99
Is the unique software solution that defines a new standard.

Experience is nearly unlimited capabilities in all relevant catorgories. ***Turbo Calc v2.1*** CDROM.

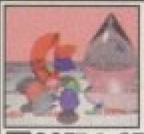
Design - Extensive formatting options, all supported font formats allowed, no colour restrictions, various cell frames etc.
Functions - More that 100 functions covering arithmetical and financial needs
Diagrams - All common chart types supported, footer and header, legend and axis labelling, output as IFF-file or graphic printout.
Printout - Out in built-in printer font (draft mode) or as freely scalable graphic (requires OS2.0 or higher).
Technical Characteristics
Sheet size limited by available memory only, no restrictions in sheet or windows quantity, import of foreign formats supported (eg MS Excell), detailed amiaguide manual.

*Pay By Credit Cards, Cheques, Postal Orders, Euro Cheques & Switch * All Prices include VAT * All phone Orders sent By 1st Class Post the Same Day.*

1 **ORDER OVER £60**
& GET ANY 4 OF THE CUT PRICE CD (AVOVE) FREE

2 **ORDER OVER £25 AND GET ANYONE OF THE FOLLOWING TITLES FREE OF CHARGE**
- EURO SCENE - BCI NET 1
ILLUSIONS IN 3D - PROFESSIONAL PCX 1 - TERRA SOUNDS
THE BEAUTH OF CHAOS - WORLD OF SOUND - ESSIONAL UTILS

EPIC MARKETING
AMIGA SOFTWARE

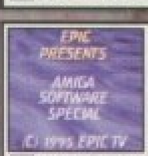

Basically this is a 3 disk compilation of tools which should really have been on Workbench. eg: Virus Killer, Fast text editor and displayer. Menu system, File manager, A few Workbench games and more. Only £7.00
☐SCF7-3. STUFF COMMODORE FORGOT


Text Engine is the easiest to use Wordprocessor package available on the Amiga. It even includes a competent Spell check feature. Suitable for all Amiga's. Only £3.00
☐TXE3-1. TEXT ENGINE

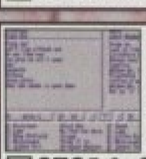

News maker is a simple to use colour Desktop publishing package. Import your own graphics, text etc. Compatible with all popular printer makes. Only £4.00
☐NRL4-1. NEWS MAKER


Create your own fascinating 3D magic eye images with ease. This package includes The Random Dot Stereogram generator and a number of ready to use images. Only £3.00
☐RDS3-1. MAGIC EYE KIT


Professional graphics converters, can convert graphics between the Amiga, PC, Mac & Atari ST. Supports GIF, TIF, IFF, PCX, BMP etc. Kickstart 2 or above recommended. Only £5.00
☐GFC5-2. GRAPHICS CONVERTERS

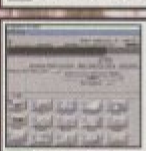

A six disk collection of Video titling tools, video wipes, fonts, Video titlers, Subtitle generator, Video backdrops etc..... Suitable for use stand-alone or inconjuction with Scala etc.... Only £12.00
☐VID12-6. VIDEO TITLING TOOLS


A collection of essential hard drive maintenance tools. Like: disksalve 2, HDbackup, HD Menu system, Virus Checker, and dozens more. Only £5.00
☐HDT5-2. HARDDISK TOOLS


A powerfull set of cataloging tools. Catalogue your Record, CD, Video and disk collection with ease, and search on any aspect or field. Suitable for use with Kickstart 2 & 3 only. Only £5.00
☐CTG5-3. CATALOGUERS


Little Office consists of a powerfull Wordprocessing package, a spell checker, A diary system, a name and address database, and a powerfull spreadsheet. Kickstart 2 or above. Only £7.00
☐IFC7-3. LITTLE OFFICE


Around 50 scalable compugraphic fonts for use with Wordworth2&3, Pagestream, Workbench 2&3. High quality printout from 5point upto 100point. Only £7.00
☐PSF7-3. COMPUGRAPHIC FONTS

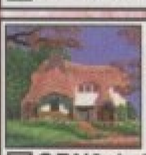

If you've just got a new A1200 hard disk then to prep & install it correctly you'll need the correct software. This software comes supplied on 2 disks. If your gonna do it, do it properly. Only £7.00
☐AHD7-2. A1200 HARD DISK INSTALLER


Dozens of easy to follow recipies. If your a budding Ian Beele or Floyd then this gourmett cookbook is just the thing for you. You'll be a professional in no time. *(Be sure you test your cooking on your In-laws first!)* Only £3.00
☐GCB3-1. GOURMET COOKBOOK


If you've just purchased your Amiga you may be a bit boggled how you use it properly, Well this five disk set take you through the CLI/Shell, Workbench step by step showing you every thing you need to know. Only £9.00
☐ABG9-5. AMIGA BEGINNERS GUIDE

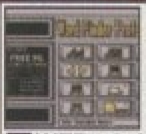

Mono Pagesetter clipart contains hundreds of great mono clipart images for use in any version of Pagesetter. Subjects include: Animals, People, Transport, Hi-tech, Computers, Sports, etc.... Only £3.00
☐MPC3-1. MONO PAGESETTER ART


An essential collection of disk recovery & salvage tools for any Amiga. Weather a floppy or your Harddisk has concieved an error this package will see you allright. Easy to use. Only £5.00 KS 2 +
☐DRT5-2. DISK RECOVERY TOOLS


It's time to put on your shorts and dig the garden.. NOT. Now the best way to get out of doing this is to use the excuse that you are far to busy designing the garden to actual do it!. Only £3.00
☐GRN3-1. 3D GARDEN DESIGNER

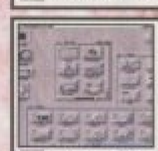

A collection of over 100 popular and more unusual printer drivers. Supports the canon, Panasonic, Star, HP, range of printers aswell as hundreds more.... Very easy to use installation procedure. Only £3.00
☐DRV3-1. PRO. PRINTER DRIVERS


Miscellanous colour clipart images. Around 100 in all covering: cats, dogs, cars, trees, planes, boats etc... Suitable for use in any Paint or Desktop Publishing package. Only £9.00
☐CCP9-5. COLOUR CLIPART


Word finder Plus is the most powerfull AMiga crossword solver available to date. Can solve anagrams, crosswords etc. contains a dictionary of over 50,000 English words, and you can easily add your own. Only £5.00
☐WFP5-2. WORD FINDER PLUS


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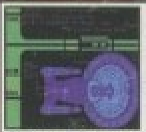

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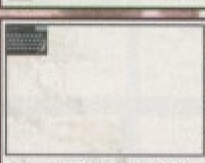

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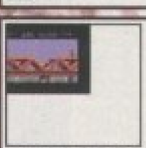

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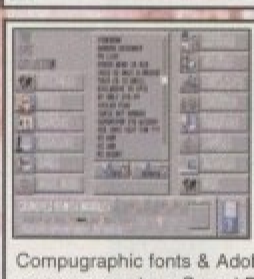
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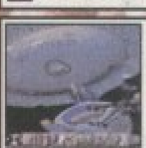

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Beginners guide Part 5

If you want to become an Amiga **expert** and leave behind beginner's blues, here's a **helping** hand to set you on your way

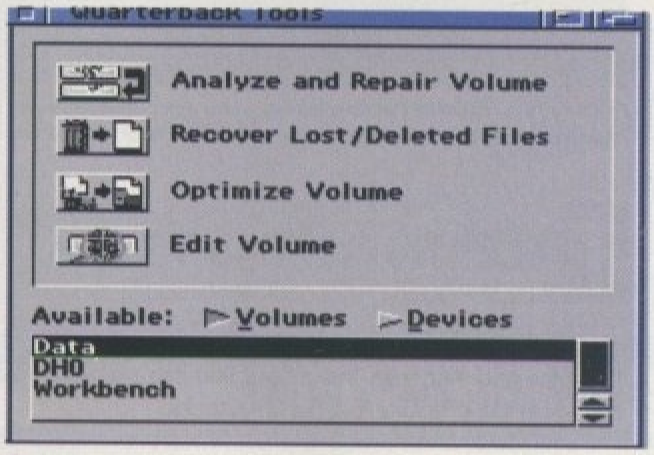
SLOW BOOT-UP

If you don't already have one, the greatest accessory to any first-time Amiga user is a hard drive. Unfortunately, when a hard disk fails it seems as if the bottom's fallen out of your world.

There are many non-fatal errors that can occur with a hard drive and 90 per cent are due to user error. One of the most common is the invalidated drive – invariably Workbench. Workbench will inform you of this error with a requester stating that the drive Workbench is not validated. So what are the symptoms?

The symptoms are a Workbench that seems to take an eternity to load, a hard drive light that continues flashing even when Workbench has loaded, and, of course, the not validated requester. The problem usually occurs when a user, that's you, has removed a disk or reset the computer while something was being written to the hard drive – not the done thing.

The solution, in most cases, is to wait until the hard drive light stops flashing and to reboot, or to invest in a good hard drive repair program such as Quarterback Tools or Disk Salv. Check the adverts in *Amiga Computing* for these products.



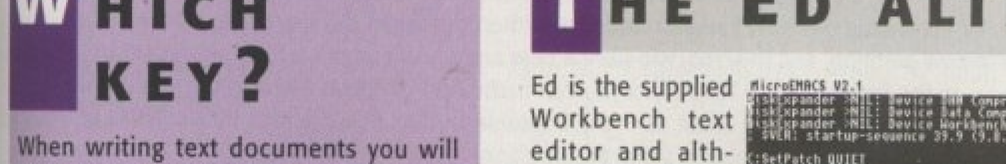
If you reboot your Amiga while copying data to your hard drive it may become invalidated. QuarterBack Tools to the rescue

WHICH KEY?

When writing text documents you will often come to a time when you need to type in a character which doesn't appear to be on the keyboard. The copyright and Diphthong symbols (© and Æ) are often the most common characters which send you round the keyboard.

Workbench comes complete with a very useful program called Keyshow – located in the Tools directory – which will display all the different characters that can be gained by holding down two or more keys at a single time.

All you have to do is press the Alt, Shift and Ctrl keys in any combination and the graphic keyboard will display the characters that can be used with the combination. If you press the Alt key you will see the © character appear over the E key. Therefore, Alt combined with E will produce ©.



Finding the right key character such © and Æ can be a real pain. Use the KeyShow program to help you

THE ED ALTERNATIVE

Ed is the supplied Workbench text editor and although it features the basic elements of a text editor, you'll soon realise it is extremely limited in the power department.

Fortunately, Workbench also comes with another, often neglected, text editor which features many useful and powerful features. MEmacs, located in the Tools directory, is a very competent editor which serves as an excellent enhancement to Ed. MEmacs contains many of the features found in commercial editors and also allows access to CLI commands – usually typed in the Shell. MEmacs is hardly ever mentioned by Amiga users but it is far superior to Ed.



Although Ed might seem like the only Workbench text editor, Although Ed might seem like the only Workbench text editor, MEmacs is an excellent alternative

FASTER DISK ACCESS

Even if you've got a hard drive you'll never escape completely from having to use the dreaded floppy disk. Disk accessing and writing can be a real chore due to the slow nature of floppy disk drives.

Thankfully, Amiga DOS provides a command that can actually speed up disk access considerably. In fact, your Workbench already uses it. The command is AddBuffers and if you load up your startup-sequence in the S directory you'll see it under C:Version >NIL:

```
AddBuffer >NIL: DF0: 15
```

By changing the value 15 to a greater number you can increase the amount of buffers (RAM) used in order to speed up disk access. Beware though – using too many buffers can slow your system down due to the lack of RAM. On a basic Amiga of 2Mb you can safely set this number to 50 or even 100.

USE YOUR MEMORY

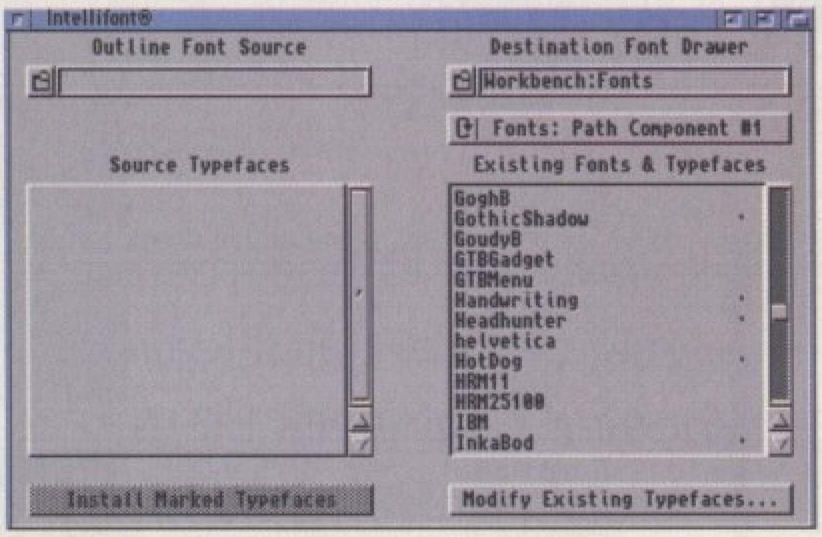
Working from a floppy disk soon becomes tiresome due to the slow access and writing times. The process can be made quicker, though, by copying the files you want to work on into RAM which is faster than a hard drive – it is almost instant.

Once you have finished your work you can then copy it back to the floppy disk. Using this method you only have to access the floppy disk twice. Performing this task with the floppy disk would take infinitely longer.

SMOOTHER FONTS

Your Workbench uses what are known as bitmap fonts which are fonts made up of pixels. The problem with bitmap fonts is that when scaled in size they tend to look chunky and blocky (called jaggies). IntelliFont, located in the System drawer, allows you to install special outline fonts.

Outline fonts are better than bitmap fonts because they are drawn using mathematical equations, so when they are scaled they maintain their smooth quality. You can install new outline fonts using IntelliFont and even create new bitmap fonts out of outline fonts. All your current outline fonts are indicated with a * symbol.



Workbench is no longer restricted to bitmap fonts. Outline fonts provide beautiful fonts with no loss of quality

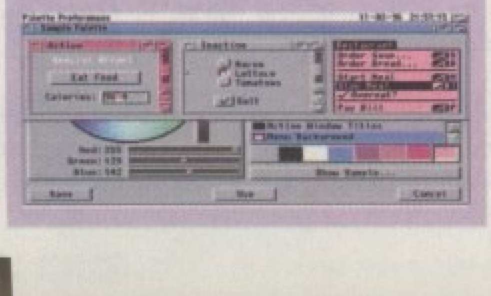
RAINBOW AMIGA

Changing the colours on Workbench can prove to be a great deal of fun but you can do more than change the icons and backdrop colours – you can also change the colour of all the window and information elements.

The first thing to do is load up the Palette program located in the Prefs drawer. The elements are presented in a scrolling gadget with the default colour in a box to the left.

If, for example, you select the element labelled Active Window Titlebars, which is originally blue, and then choose black you'll find that your windows change to this colour when you hit the Save button. however, before you commit yourself to any changes you can click the Show Sample... button and you will be presented with a default window and associated gadgets in the colour scheme you have specified.

Even though Workbench is capable of running in 256 colour mode, you can only edit the first eight colours. This also applies to the elements – they too can only be of a colour in the first eight.



Not only can you change the colour of icons and backdrops but also window elements and text

Jargon box

RAM *– Read-Access-Memory. RAM is memory provided by the computer for you to use as you wish. RAM is extremely fast but its contents are lost when the Amiga is turned off.*

MB *– MegaByte. A MegaByte is an indication of RAM size. 1Mb is equal to 1024 K (see below).*

K *– Kilobyte. A Kilobyte is equal to 1024 bytes (see below).*

Byte *– a byte is equal to 8-bits (see below).*

Bit *– a bit is the smallest value a computer can store. It is perceived by computers users as either 1 (on) or 0 (off).*

Buffers *– these are areas of RAM put aside specifically for use by other tasks.*

Validation *– this is the process the Amiga uses to understand and interpret hard disks and floppy disks. All disks are validated (or checked) first before being used.*

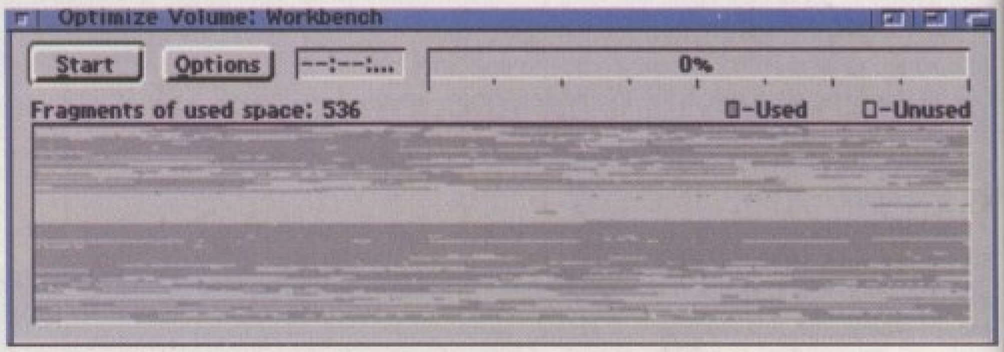
CLI *– Command Line Interface. Use window to the Amiga's Disk Operating System or DOS (see below).*

DOS *– Disk Operating System. This allows you to communicate with your Amiga. Before desktops such as Workbench became available users could only communicate with their computers via DOS.*

BITS AND PIECES

Hard drives suffer from a problem known as fragmentation. When data is copied to your hard drive or data moved around, the files tend to get spread right out across the hard drive. The result of this is that files on your hard drive take longer to load and Workbench windows take longer to draw.

Using a program such as Quarterback Tools, you can de-fragment your hard drive. This process involves taking all the programs off and then replacing them so they are not split up or spread out. Although the process can take a fair amount of time, the speed increase in access time is greatly enhanced. You should look to de-fragment your hard drive once every six months.



This is a fragmented hard drive – the grey areas should be a solid block. Quarterback Tools shows how the data on this hard drive is split up considerably

THE RIGHT SETUP

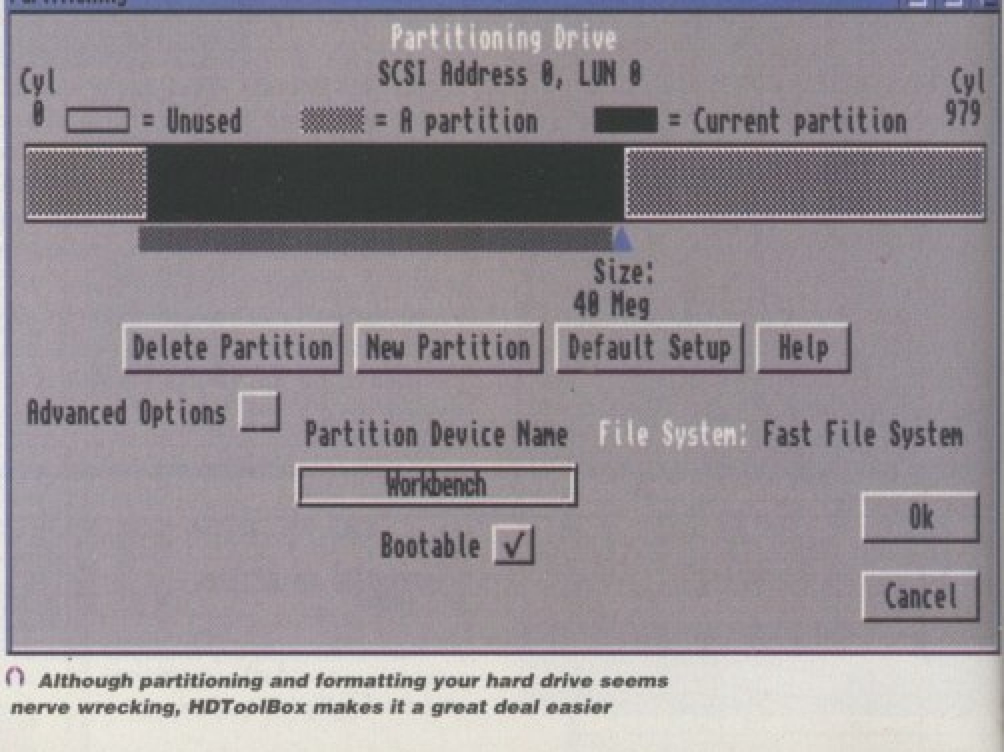
If you own a hard drive it will have been more than likely formatted and Workbench installed at the retail end. Although this means you can use your Workbench immediately, you may find the actual setup lacking that personal touch.

I previously mentioned the usefulness of a Data partition for backing up purposes. Unfortunately, most setups don't take this into consideration which means you have to alter it. Workbench comes complete with HDToolBox in the Tools directory which allows you to partition (cut up) and format your drive.

When you load HDToolBox you are presented with the main window and a set of options. If you click on the button labelled Partition Drive you will see a volume indicator with a small blue arrow. By pulling this arrow you can reduce and increase the size in Mbs of the hard drive. By clicking on the New Partition button and then clicking in the spare volume area you can add a new partition, and this, too, will have a blue arrow you can move up and down just as before.

In the Partition Drive Name box you can name each partition – one will, more than likely, be called Workbench. You must turn the Bootable button ticked which tells your hard drive to automatically try and boot up using this partition.

To make the changes permanent you can then click on the Okay button and select Save Changes to Drive at the main HDToolBox window. To finish off the procedure you should then boot with your floppy disk Workbench and format each partition with the original names you chose in HDToolBox. All that's left then is to install Workbench to the new Workbench partition. Easy, huh?



Although partitioning and formatting your hard drive seems nerve wrecking, HDToolBox makes it a great deal easier

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U551 ASSASSIN BOOT BLOCK over 50 bootblock protector
U555 CROSSWORD CREATOR (not WB3) crossword maker
U561 PERM CHECK a full POOL PREDICTION program
U568 ICON CONSTRUCTION KIT icon making program
U569 ICON ready made (4 disk)
U590 A600 NUMERIC PAD EMULATOR (A600 only)
U591 DEGRADER (not WB 1.3) A500 emulator
U594 KILL AGA-make older programe run on A1200
U600 C64 EMULATOR II util. & document
U601 DISKSALV II + ABACKUP (not wb1.3)
U603 THE CHEAT COMPENDIUM for over 450 games
U609 HOW TO CODE IN C (2disk) - many examples
U622 ACTION REPLAY V1.5(A500/600)-cartridge on disk
U623 ACTION REPLAY V4 (A1200 ONLY) same as above
U645 PC EMULATOR V.2.31(WB3 only) SVGA PC emulator
U650 COPY & CRACK TOOL 2 more powerful copy program
U680 NEW SUPER VIRUS KILLER(not wb3) 315+ virus
U689 FORCASTER V2-horse racing prediction program
U690 ASSASSIN COPIER (lots)include Xcopy3/dcopy ect
U694 SUPER DUPER 3. (NOT WB 1.3) disk copier
U696 AMITOOL PROFFESSIONAL disk database tool
U699 MEGACHEAT V3 +(more games cheat even for)
U700 ANIMATION CONSTRUCTION KIT V1.2 + good
U702 V MORPH V2 create smooth morph animation
U703 POOL TOOLS 2(Latest)prediction horse racing
U705 TRON-CAD-best create circuit board+examples
U707 GAME TAMER(3&4)(2)For even more games cheat.
U708 LAST WILL & TESTAMENT-write your will
U710 PERFECT-PAINT 32 Very easy to use paint package
U714 ENGINEER KIT various test kit for Amiga
U718 MAGNUM 1.9 REGAIN the best disk magazines creator
U721 FONT FARM V3 + load of font + font viewer
U724 EXOTIC RIPPER rate as the best sound/graphic riper
U724 PARNET SET UP(2) require for the connection
U725 PARNET CABLE MAKER INSTRUCTION project save £££
U728 AREX MANUAL(notWb1.3) complete manual.
U729 ASSASIN BOOT UTIL 50 boot block creater util
U730 SOFT AGA (A500plus or A600) & wb 1.3 meg
U731 A - Z GAMES CHEAT for over 500 games
U732 MINI MORPHS create TERMINATOR 2 effect
U736 AWARD MAKER II-hundred of ready made
U737 ASSASIN CRUNCH & COPY TOOL (WB 1.3 only)
U738 S.KICK PROFESSIONAL v3.2 Various K-start
U739 TURBO IMPLODER (WB 1.3) powerful disk cruncher
U740 CROSS DOS 5.1 plus read/write PC<>AMIGA disk
U741 HD-DISK TOOL BOX +many more Disk util recommend
U742 HOW TO CREATE AUTOBOOT DISK.complete + util
U743 Util .Disk .Maker v3. MAKE AUTO BOOT DISK
U744 FRACTAL MANIA+BIOMORPH Brillent collection
U745 AF WORK BENCH (3)(WB 1.3 ONLY) replacement
U746 3D GARDEN DESIGNER & view from any angle bril
U747 ASTRONY V2 predict star planet prediction.
U749 DISK REPAIR 3(floppy & HD)include soft-protect
U750 MUSIC CATALOGUE (not A500(1.3) very easy to use
U750 MUSIC CHECKER TOOL must for any Amiga owner
U753 HARD DRIVE UTIL+lot more Hard DRIVE UTIL
U754 PARBENCH installer (complete)
U755 PRO CAD electronic latest circuit board designer
U778 WB MENU LAUNCHER-menu system, easy to use
U779 ICON PLUS (3DISK) Hundreds of stunning ICONS
U761 RELOCKIT 1.4 latest WB1.3 emulator
U762 FAKE FAST MEMORY make more older software run
U763 POOL WINNER GOLD must for all gamber
U776 TEXT RECIEVER project highly recommend
U781 DOSTRACE V2. display information why some programe refuse to run, also monitor Amiga activity. RECOMMEND
U783 POOL 2 Mass type game. Recommend
U786 HARD-DISK MEMORY V2 use HD as memory (re MMU)
U790 WINDOW BENCH V2 (WB 2/3) Brilliant new workbench replacement, include lot of useful utilities
U791 COMPUTER DIAGNOSTIC TEST V9 amiga Fault finding

U800 PRINT A CARD include many ready made
U801 MULTI-PRINT V4 lot of printing util
U805 DISK PRINT print custom disk lables
U807 FONT & PRINT Load of utilities to view & print your font collection. RECOMMEND
U831 POOL WIZARD -(football) prediction
U832 DIVIDEND WINNER - Prediction programme for use with LITTLE WOOD, VERNON, ZETTER Etc
U834 FORCASTER 2.02 New Horse prediction Prog
U839 AUDIO MAGIC 4-4+tracker V3.Electronic
U843 AUDIO MAGIC 6- Octamed player ect
U846 C64 emulator V3 (2DISK) C64 emulator latest
U848 SPECTRUM EMULATOR V2- Spectrum emulator
U850 EAGLE PLAYER (2disk) the best music player
U851 DELI-TRACKER (2disk) play all music format
U881 SONIC DRUM KIT V2 Make drum sample
U882 DISK COPY Pack- collection of 10 disk copier
U883 OPTI-Utils 1- over 30 disk copier/Optimise
U885 INTUITION BENCH MARK V6.5 (Not Wb1.3)
U886 COMPLETE WB UTIL (2DISK) very useful
U887 DISK REPAIR KIT 4-Include disk repair, undelete, softprotect, diskmate, sysinfo, ect
U950 STEREOSCOPE V2.a (not A500,1)
U953 THE RANDOM DOT STEREOGRAM (NOT WB 1.3)
U954 FORTH PROGRAMMING (NOT WB 1.3)
U957 SCALA BACKGROUND (2disk) High quality image
U959 PROGRAME LOADER-New HardDisk menu
U961 MAGAZINE E 3(2disk) science fiction magazine
U963 AMOS & AMOS PRO COMMAND EXTENSION
U967 PRO-GAMBLE-Super Horse prediction system
U978 DELUXE PAINT 4 BURY SYSTEM-(2disk) Get out deluxe Paint instain on line for every fuction
U981 VIRUS CHECKER V6.34 +AUTO UPDATE Modem
U982 DIRECTORY OPUS V4 add Extra Command
U983 MAGIC WB & MAGIC MENU -Both Latest version
U986 VIRUS-WORKSHOP V5.1-the best Virus killer
U987 GRAPHIC-CONVERTER (2D) Convert picture
U988 TURBOCAT Auto catalogue your disk library
U989 AUTOBOOT DISK MAKER V4 -very useful
U993 IMAGINE STUDIO V1.2(2) The best PD image (picture) processor available rival even the commercial costing hundreds of pound. (not K1.3)
U969 POWER-CACHES Speed up disk loading Access
U970 HARDDRIVE SECURITY Lock disk Hard Drive scurity programe eg Lockout2,Password & many more
U972 HARDISK & FLOPPY DISK DOUBLER (Epu/mot/WB1.3)
U973 CHEAT FOR 800 + GAMES, LEVEL CODE ect
U974 HD GAMES INSTALLER 2 install top games
EG.ZOOL2, Rise Of the robot,Mortal Combat2 & more
U975 DMS V2.04 Pro. Crunch entire disk. (not K1.3)
U976 MAGIC SLECTOR V1.4-Change Magic WB backdrop
U977 MAGICWB ICON ARCHIVE (3) 1000's of MagicWB
U998 X-PASSWORD-protect your hard/floppy drive
U979 ICON ARCHIVE(2) 1000's of normal icons
U994 TEXTURE STUDIO. Render Various Texture for use with imagine 3 ect very FINE (not 1.3)
U995 PRO-GAMBLES V2 must for all gamblers
U996 BOOKIE BEATER- gambling program to repair
U997 HD GAME INSTALLER 3. Install more games
U998 EXOTIC RIPPER V3.b Latest ripper
U999 HD REMOVER (new collection) require MMU
U1000 MAGIC OPUS VOL 2 & 3 (2D) more Opus util
U1001 CAR DATA ANALYST-check your car's cost
U1002 TURBO CAT-(WB 3&3 only) catalogue program
U1003 LOTTERY WINNER V2-new version
U1005 BASIC-ELECTRONIC-Teach all about electronic
U1006 LOTTO LUNACY V2 Update latest lottery program
U1007 ALL NEW HARD-DISK & FLOPPY DISK TOOL
U1008 HARD-WARE PROJECT 2 (2) Build their own project even how to fit Amigas in a tower case
U1009 DATA ALERT 3-explain why your computer
U1010 WB2.04 INSTALLER-install A500+/A600 to...

PUZZLE GAMES II

Massive collection of the best puzzle games ever released including some of the classics like Nubic Cube, Picture Puzzles etc, much too many to list. Very popular.
5 disk pack only £4.99

ARCADE GAMES II

COLLECTION OF THE VERY BEST SHOOT EM UP
MUST FOR ANY GAMES PLAYER
5 disk pack only £4.99

BOARD GAMES II

The very best board games ever released. This pack contains the very latest, CHESS, CHECKER, SCRABBLE, MONOPLY & DOMINOES recommended.
5 disk pack only £4.99

Printer Pack

5 disk pack with all the latest printing programs specially designed for printing out high quality documents, text & pictures etc and it is even able to print out A5 Booklets (very handy). Easy to use. A must for any Amiga owner with printer.
Printer Pack (5 disks) only £...

GAMES

G222 MEGA 21 GAMES amazing 21 games
G235 DRAGON-CAVE brilliant 3D puzzle game
G240 QUADRIX very addict excellent
G242 TAKE EM OUT like to Operation wolf
G253 DESTINE MOON BASE Arcade conversion
G272 TANK BATTLE 2 player tank battle game
G278 ARCADIA the best ARKNOID clone
G291 Q-BOID cross TETRIX and INVADERS
G303 DIMENSION X 2 player LIGHT CYCLE GAME
G308 NEBULAR Excellent 3D shoot em up
G316 GALACTIC Excellent 8 levels arcade
G317 HYPER-BALL Speed ball +level editor
G320 GHOST-SHIP Very good 3D adventure
G325 BATTLEMENT hunch back of notcha
G326 MEGA GAME COLLECTIONS III 3 top games
G328 MADONNA NUDE PUZZLES for 18+ only
G331 GRAVITY massive space exploring game
G333 CYBER-NETIC Brilliant 8 way blaster
G334 DONKEY KONG -(A1200 order code AGA296)
G335 CRAZY SUE II- best platform to date
G336 PROJECT SKODA CHALLENGE (& track editors)
G344 STAR-TREK similar to RAID2 but harder
G355 DOODY very cute & extremely addict
G356 WONDER LAND amazing graphic recommend
G362 DELUXE PACMAN + best pacman ever release
G367 CARD GAMES collection
G368 WIZARD-DOMAINS-dugeon type games
G370 KALATRIZ (notA1200) arcade tetriz clone
G371 AIR ACE II Very playable shoot em up
G384 OTHELLO best PD version
G386 MOUSE IMPOSSIBLE very addictive puzzle
G390 TETREN most polish Tetriz ever release
G398 STRIKEBALL brilliant base ball clone
G399 TRAILBLAZER brilliant 3D game
G400 FIGHTING WARRIOR like street fighter
G404 DOMINOES only one of it kind on PD
G406 TOTAL WARS -strategy like chess in space
G411 BATTLE CAR 2- 3D car racing
G431 NESTER CARD GAME- hours of fun for a quilt.
G435 ROULETTE amercan roulete excellent
G438 TRAILBLAZER 2 C64 conversion
G441 E-TYPE 2- very good asteroid great graphic
G443 OLEMPIAD DISK (2D) Olympic sport events
G445 DESCENDER GAME -dark, search & desender
G446 OBLIDOX excellent Arcade/Puzzle game
G448 PARACHUTE JOUST quite playable
G453 CASTLE OF DOOM V3 graphic adventure.
G460 WIBBLE WORLD GIDDY Large platform game
G467 CASH FRUIT- good fruit machines
G479 AMOS CRICKET cricket games
G488 EXTREAM VIOLENCE 2 player battle out
G489 ENIGMA MACHINE very challenging puzzle
G490 MEGA BALL 2 very playable break out clone
G491 BOUNCE & BLAST brilliant platform 10/10
G492 ZOMBIES & DEFENDER 2 fantastic games
G494 MERCANERY SIMULATION 3D wars games
G499 LIFE simulation very interesting
G500 TRANSPLANT about one of level fast arcade.
G501 KLAWZ THE KAT-great platform games
G503 HIGHWAY BLUE HIGHWAY SPY HUNTER on the C64
G531 OPERATION FIRESTORMS-brilliant
G534 CASTLE KUMQUAT similar to Alien breed
G535 BLACK DAWN brilliant graphic adventure
G538 MORIA 5.4 The latest Dungeon & dragon
G539 BRIDGE Good version of Bridges
G540 DNA ATTACK bloody adventure

G541 REBOUNCE 2 player futuristic breakout
G542 ROAD TO HELL brilliant car racing
G545 SUPERTOM CAT New vertical shoot em up.
G545 KUNGFU CHARLIES mix with platform brill.
G546 RAID 4 latest vertical scroll em up
G546 QUIZMASTER very good quiz program
G552 ELEVATION games base on lift ??
G560 IMPERIAL WALKER -Base on STAR WAR games
G654 STARBASE 13 (2D) Bril like MONKEY ISLAND
G657 AMOS LOADSA MONEY best FRUIT-MACHINES
G659 MR MEN OLYMPIC (2D) many event to complete
G660 4 L.C.D DREAM 4 small hand held games
G664 NEIGHBOUR GAMES (2D) base on the TV series
G671 GOLF (2DISK) One of the first & decent GOLF
G668 AMOS CRICKET 2-New Amos cricket simulator
G669 MEGA GAMES VOL 2 best PUZZLE games
G672 JIGSAW (2DISK) very playable Jigsaw games
G673 BOBBY GARDEN + DIGGER (NEW) Brilliant
G676 HIGH OCTANE Fast car racing (notwb1.3)
G675 TIME RUNNER amazing graphic adventure
G679 SPACE INVASION 2 - Fantastic Galaxian
G681 AUTOMOBILES - PD version of SKID MARK bril
G682 BANDIT MANIA - Brilliant fruit machine demo
G687 BUZZ BAR-Brilliant asteroid
G689 GUN FIGHT (not A500(1.3)
G690 THE REAL POPEYE 64 (A500 1.3 only)
G692 SYSTEM DEFEND-Brilliant Defender clone
G696 AMIGA-BOY-Game boy emulator + tetriz
G727 OETHELL in SPACE. Recommend
G735 OVERLANDER Brillant arcade MOON ALERT
G737 SERIOUS BACKGAMMON The best in PD BG
G771 STAR WOID 2 (New) brilliant Thrust
*G772 UN-SENSIBLE SOCCER very similar to Sensible scoccer games. RECOMMEND

101 GAMES 2

PRICE ONLY £10.99
This is the very latest all new 101 games compilation pack 2 containing some of the very best in PD games like Zeus, Wonderland, Dragonflies etc. Much too many to list.
All games are selectable from an easy to use menu & most games come with full playing instructions
COMPATIBLE WITH ALL AMIGAS

G773 FRUIT MANIA - Brilliant Fruitmachine.
G774 TRICKLE TREAT -like DOOM on the PC
G775 FOOT-BALL MANAGER-new version
G782 SOLO ASSAULT 3D like Wing Commander
G783 SEED OF DARKNESS-Brilliant graphic adven
G784 NANO FLY Superb explore game RECOMMEND
G785 THE GREAT GOLD RAID- very addicted
G787 ANT WAR V1.9 (LATEST) not 1.3
G788 ZENO-MORPH -Great grahic
G789 TASK FORCE very good MIND SHADOW clone
G790 GREEN FIVE Amazing 3D graphic like
G791 PROFFESIONAL BINGO CALLER
G792 MARTIAL SPIRIT like Street fighter II
G798 EXCELLENT CARD GAMES collection
G809 BLITZ 2 fast action shooting games
G811 TEMPORAL IMPLACEMENT-graphic adventure
G812 ADAY AT THE RACE-V.Goodhorse racing games
G813 JET BOY and his 3 friends
G820 BOULDER ORIGINAL with 80 level
G821 BOULDERDASH cave/level Construction kit
G822 BOULDER COLLECTION 2(3 160 level (2disk)
G839 BOULDER PACK with 640 level on 8 disk
G860 ALIEN NET WORK-new Spacing invader
G861 BATTLE FORCE excellent text adventure.
G862 GHU CHESS the best chess with 10 level
G864 SWORD OF YIGG Graphic adventure
G867 POWER-TETRIZ for 1 or 2 player
G868 SUPER SMASHING TETRIZ
G870 CHESS II & CHECKER One of the best around must for all CHESS or CHECKER player
G871 GRAVITY FORCE 2 1 or 2 player thrust clone

G872 SCHNEBITZ Commercial quality puzzle games
G875 DELEXE GALA v2.3(new) add new feature & bouns games + 2 player RECOMMEND get it now
G876 THE KRILLIAN INCENDENT like ELITE2/Epic
G878 QUANTUM-Maze colect & escape type games
G879 RAG TO RICHES - like MONOPOLY

NEW 101 GAMES PK 3

New 101 pack 3 contains over 100 games, runs on all Amigas, only £11.99 offer buy any 2 packs together & receive a free £4 token for use with next order. This offer cannot be used with any other offer current & subject to condition apply.

G884 WIPE OUT-mindless blasting games
G885 GODZILLA Another shootem up
G886 SUPER MEGA FRUIT- All new Fruit Machine
G888 DRIVING MANIAC 3D (fill vector like Ind/500) car racing- very fast. RECOMMEND
G889 PLANET FALL - Lunar Lander clones
G890 GRAND PRIX MANAGER (NOT 1.3)
G891 ROCK TOOTH ADVENTURE Very good multi level shoot/collect em up RECOMMEND
G892 POD 2- Maze type games. Recommend
G893 SUPER OBLITERATION Blast asteroid very similar to PANG 2 lot of weapon RECOMMEND
G894 SPACE INVADER II -New SPACING INVADER
G897 THE SEEKER Brillant POPULUS clone. REC
G898 ALIEN GENOCIDE (2) Shoot aliens set in space.
G899 PUCKMAN. One of the better PacMan around.
G900 SUPER-BATTLE ZONE.3D (not WB1.3)
G901 M*A*S*H + (ANTWAR 2) play very similar to LEMMING & WORM, with load of Weapon (Brillant)
G904 LAST SOLDIER (2) multilevel platform games
G905 CIBERTECH (2) excellent ALIEN BREED Clone
G906 HANGMAN any one for a game?
G907 ACE SPACE nice Platform games
G908 COLOURMANIA-like/Klatriz type puzzle games
G910 HARRY HADDOCK- Brillant platform games
G912 MANGLE FENDER -Brillant, Smash up other cartank ect to win. extremly addicted. get it
G913 ARCADE GAMES CLASSIC Vol 1 & 2 (2d)
G914 ICEY SPEEDWAY -play like Desert strike
G915 COW WARS. Very addicted 2 player games
G916 ISLAND -Play like Monopoly.
G919 LOOT THE LOT Pro Latest Lottery predictor
G920 LOTTERY PROFFESIONAL This version use
G921 MONOPLY, (board games) The best version
G922 JET WILLY 3 - excellent platform games
G923 FLAMMING ENGINE-Superb car racing
G924 POWER MACHINE- Graticaly brilliant shoot
G925 SUICIDE-MACHINE Operation wolf style
G926 ZAXXON 3D Superb C64 3D blaster games
G927 BONG V3. Great platformer, recommend
G928 PUNTER-Animate horse racing games
G929 MAGIC WATERS RING-Platform games
G930 WHEEL CHAIR GLADITOR-Very fun to play
G931 NIMBLE-Brillant New Board Games
G933 BLACK DAWN 3- THE NEW BEGINNING (2) Superb 3D adventure. RECOMMEND
G934 R3 ROCKET (NEW)very good rockets games
G935 BATTLE SHIP- the finest PD version
G936 LAST LAP - Fast car racing

GAME HINTS & CHEATS II

Play your favourite game for age? but can't get to the end of level or game? Having problem with some games? 5 disk pack with 1000s of games cheat/help/level code action replay poke etc., should help you finish many games - suitable for all Amigas only £4.95.
Update & release on 28 July '95

101 GAMES

PRICE ONLY £9.99
Brilliant collection of over 100 of the very best of PD games includes INVADER 2, Tetris, Monopoly etc. Much too many to list. Very easy to use menu system. Most games come with full playing instructions.
MUST FOR ANY GAMER PLAYER.
All games are selectable from an easy to use menu & most games come with full playing instructions
COMPATIBLE WITH ALL AMIGAS

EDUCATION

E001 KID PAINTS. superb paint special for kids
E002 COLOUR IT brilliant computer colouring book
E003 TREASURE SEARCH find the hidden treasure.
E004 LEARN & PLAY II fun with A1200 math & games
E005 LEARN & PLAY II more educational programs
E006 SPANISH TRANSLATOR Spanish<> English
E008 MR MEN (WB1.3only) brilliant story adventure
E009 ASTRONOMY tutorial on solar/star ect system
E010 SIMON & SPACE MATHS maths & simon games

E011 EDUCATION PACK 1

pack with dozens of education programs ranging from maths, science to educational games recommend suitable for any Amiga. 5 disk pack only £4.95

E019 DINOSAURS teach you all about Dinosaur
E020 WORLD DATABASE require (2meg)
E021 STORY LAND II interact puzzle games rec
E022 LANGUAGE TUTOR teach you 4 language
E023 TALKING COLOURING BOOK talking Dpaint bril
E024 EASY SPELL II improve your kid spelling
E025 SCRABBLE require 2-player. brilliant
E026 WORDS can help you solve the crossword
E027 OSWALD Very colourful large cartoon game
E028 EVOLUTION breed your own hybrid
E031 IQ TEST + IQ GAMES pack 1 excellent
E033 TYPING TUTOR very good typing tudor
E035 CHESS HELPER help/teach how to play
E036 BASIC TUTOR learn about Amiga Basic Prog

EDUCATION & 21 GAMES PACK

Collection of the very best of education programs and a 21 games pack, a very popular combination for kids (run on all Amiga) 5 disks only £4.95

E038 AMIGA TUTORIAL 7 part tutorial
E039 COMPUTER CARE how to care about AMIGA
E040 GUIDE TO LOWER BACK PAIN tutorial the spine & how to avoid back pain. (recommend)
E041 KID ALPHABET display all alphabet letter
E042 FRACTION & SILOUEST maths & shape games
E043 MATH MASTER teach/test you more on maths
E044 STEAM ENGINE V2 graphic & tutorial
E045 PETROL ENGINE tutorial & animate graphic
E046 GAS TURBINE ENGINE tutorial & anim graphic
E047 STIRLING ENGINE tutorial & anim graphic
E050 DREAM FOR ANGEL explain the meaning of dream
E051 INVISIBLE WORLD brilliant recommend
E052 FISH TANK turn your amiga into a FISHTANK
E054 DEMOLITION MISSION simple game for kid
E055 WORD POWER solve crossword puzzle ect good.
E056 WORK HOLE simple game ideal for children.
E057 APPLE CATCHER catch falling apple brilliant
E059 CROSS MAZE & CRYPTOKING 2 excellent kid games
E059 VERB QUIZ find the word & it related. Bril
E061 KING JAMES BIBLE (4d) complete bibles excel
E065 TAROT clairvoyant in a instance
E068 GALLOW fancy a games of hang man?
E070 MATH DRILLS teach all basic math skill Vgood
E071 ERROR INFO give info why your amiga crash
E075 WORLD-WAR 2 graphics tutorial on WORLD-WAR release program eg simulate Starprobe/ molecube/ ect
E076 SCIENCE an excellent collection of science ideal for all who interesting or studies in science recommend, this pack come on 4 disks
E080 KIDPRIK great children paint programme.
E081 ASTRONY PACK- This is a mazing collection of programe relate to astromy. can help to locate certain or star position ect. must for anyone who studies astrony or hobby. great (4DISK)
E073 PICTURE & LETTER learn to read- first step
E074 AMIGA BEGINNER GUIDE tutorial on Amigas
E085 NODDY PLAYTIME demo >Very good
E080 KID PIX more excellent paint programes
E081 D.T.P FOR KID easy to use, excellent
E092 SING A RYHMES sing a song
E093 HIGH WAY CODE TUTOR question on highway code
E095 READ & LEARN (2D) THREE LITTLE PIGGY Story
E097 BACK TO SKOOL vol 1 collection of the best
E098 BACK TO SKOOL vol 2 in education programe
E099 BACK TO SKOOL vol 3 & games. RECOMMED

E100 LITTLE TRAVELER information on world wide
E101 WORLD GEOGRAPHY world with map & fact
E103 DISCOVERY OF THE ATOM. tutorial on the atom
E104 DESK TOP GUIDE TO MUSIC(3D) guide & theory
E107 TRUMPTY FIREWORK ALPHABET Very entertain way to teach your child the ALPHABET
E108 HOW TO DEVOLOPE PHOTO 1 (2) Excellent
E109 MR MEN OLYMPIC (2D) many event to complete
E110 CULT TV DATABASE (2D) info on early TV series
E112 HOW TO DEVELOPE PHOTO 2 (2) delevope photo
E115 ELETRONIC WORLD (3D) Complete Electronic
E116 HOW THE EARTH BEGAN-theory how the earth explode and create all the star & galaxy
E118 WORKBENCH 3 tutorial on Work Bench 2
E119 DINO WAR Quiz on dinosaurs
E120 JUNIOR MATHS Great learning aid for teaching kid on many subjects. RECOMMEND
E121 PICTURE PUZZLE brilliant JIGSAW type game
E122 WORD FACTORY Brilliant, teach kid words

KID DISKS 1,2,3,4,5

Excellent collection of education programs. Ideal for teaching kids various subjects while entertaining with game & element. 5 disks only £4.99 or order separately for only 99p per disk. Order Code KID DISK & No.

E125 JURASSIC PARK lots of info on dinosaurs
E126 CHILDREN SONG 2 contain 5 excellent song
E127 MIND SHU (A500 only) Bril Chinese Astrology
E128 ASTRO 22 PRO V3-The latest astrology prog that accurately calculates the position of the planet, eclipse, zodiac position etc. Recommend
E130 FRENCH VERD TESTER should help you with
E131 CULT TV DATA BASE II (2 DISK) info on series
E132 JUNGLE HISTORY BOOK
E133 LITTLE TRAVELLER II (2) Information on world
E134 X-FILES-Guide to the TV series very interest
E135 CHESS & TUTOR - FULLteach you how to play
E150 INTERNET-FULL guide to internet & superhigh
E151 CLI & SHELL TUTOR (help) Ideal for beginner
E152 DELUXE PAINT GRAPHIC TUTOR V 3 & 4 help
E153 JAPANESE - teach you the japanese language
E164 PAINT IT (not A500 1.3) latest COLOURING
E165 KEY BOARD TRAINER An excellent typing tutor
E166 WORD POWER- spelchecker/crossword solver
E168 CROSSWORD CREATOR-design crossword puzzle
E169 CHESS II & TUTOR brilliant Chess II game
E170 HISTORY OF AVIATION Vol 1 Excellent doc
E171 CHILD FAVOURITE-Education prog
E172 ANIMAL LAND-Learn about animal
E175 FRANTIC CODE (not A500) Learn to ...
E177 CYBER PUNK 2 for cyberPunk freak only
E178 STAR-TREK & STARTREK NEXT GENERATION THE COMPLETE GUIDE COME WITH HUNDRED OF SHOTS TAKEN FROM THE STAR-TREK SERIES
E181 SIGNATURE CREATOR customise your own
E182 VIRUS WORKSHOP V4 comprehensive guide
E184 IMAGINES VIDEO 3disk
E185 WORKBENCH 2/3 GUIDE On line help/Command
E210 LEARN & PLAY 3 Latest Education & Games
E240 BARNEY THE BEAR GOES CAMPING (2d) Brilliant teach your child about animal
E241 COMMS GUIDE V1.1 beginner modem user
E242 GUIDE TO WEATHER (3D) superb complete guide to the weather. recommend
E245 MATH ATTACK- Maths relate games for kids
E242 ANIMAL-LAND-Ideal for young kid. Excellent
E243 PICTURE-MATHS-Maths program for kids
E246 BEGINER GUIDE TO WB 3 (A1200 only)
E247 GLOBE FACT(2) fact about planet earth
E248 KID ONLY 6 excellent game to play with
E250 SANTA -Help Santa collect present games
E251 BIRSTHDAY HISTORY V2.2-
E252 BAR-TENDER-recipt for 100 drink/cocktails
E253 BEGINNER TYPING TUTOR-

NEW EDUCATION & 21 GAMES PACK

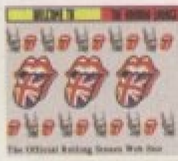
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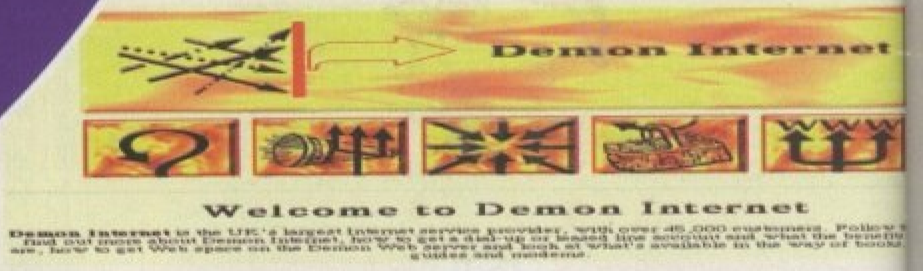
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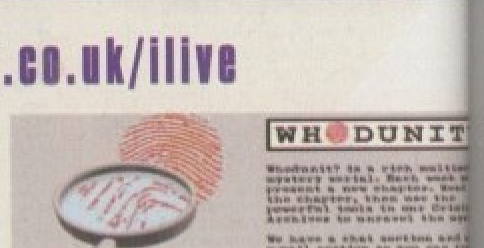
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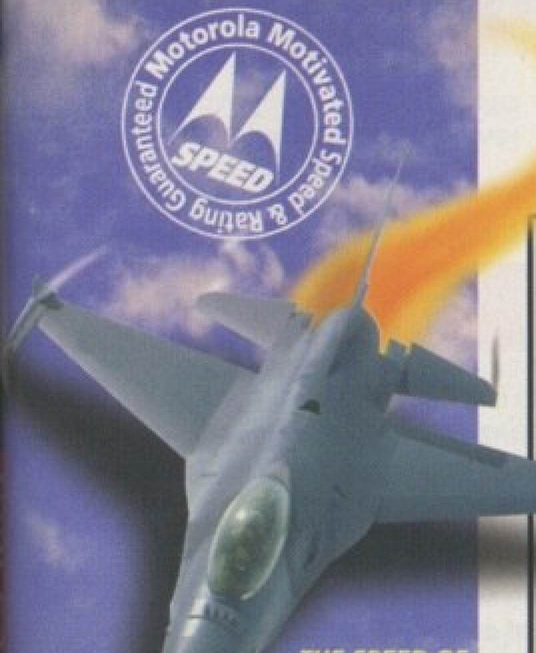
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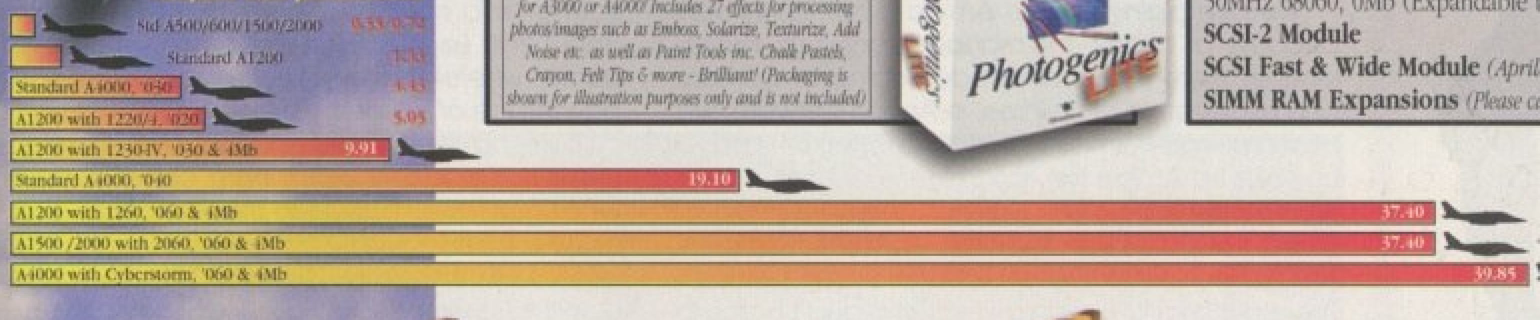
SYSTEM

Contents

The World's FASTEST AMIGAS are on this page!



THE SPEED OF OUR BOARDS ARE UNSURPASSED!
All you need to do is compare their performance



Figures shown are in MIPS and taken from comparative performance tests using SysInfo standards (1230-IV, 1260, 2060 and Cyberstorm ratings use 60 Nanosecond SIMMs).

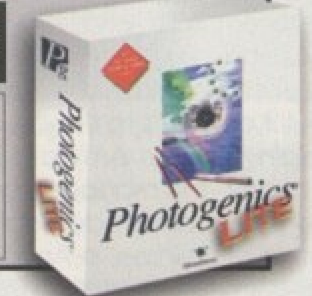
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For all Zorro-3 Amigas, this 64-Bit high speed graphics engine/blitter offers up to 1600 x 1200 pixels in 8-Bit colour or 1024 x 768 pixels in True 24-Bit Colour, with 2Mb of display memory (4Mb user upgradeable).

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THE WORLD's FASTEST... NO QUESTION!
NEW

NEW SECOND GENERATION OF THE FIRST EVER **68060** AMIGA ACCELERATOR
When you fit Cyberstorm II to your A3000, A3000T, A4000 or A4000T you can, for example, render a graphic with Imagine 2.0 software in Just 2.45 minutes... Compare that with a massive 10.34 mins on a standard A4000 '040/25! With no jumpers Cyberstorm II is fully plug and play and A4000 users can choose between SCSI-2 and SCSI Fast and Wide options (A3000 users already have SCSI built into their Amiga hardware).

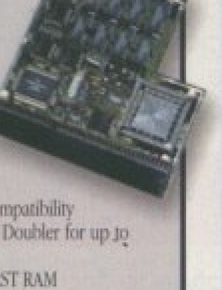
- Up to 128Mb of standard SIMMs can be installed and you can even transfer the 72Pin SIMMs from your Amiga A4000 straight onto your new Cyberstorm.
- Options include a SCSI-2 module, or a SCSI Fast and Wide module *(Available in April/May '96)*

Cyberstorm II 68060/50... £699.95
50MHz 68060, 0Mb (Expandable to 128Mb)
SCSI-2 Module £99.95
SCSI Fast & Wide Module *(April/May '96)* £149.95
SIMM RAM Expansions *(Please call for a range of SIMM prices)*

BLIZZARD 1220/4

28MHz 68EC020 A1200 TURBO 4Mb, 32-Bit RAM Expandable to 8Mb

Blizzard 1220/4 4Mb Turbo Memory Board
Offers by far the best price/performance ratio of any A1200 32-Bit RAM expansion on the market incorporating everything a good memory board should - such as a Real Time Clock, RAM expandability, optional FPU etc. With its Motorola Processor running the 32-Bit FAST RAM at an amazing 28MHz, the 1220/4 has broken all the barriers!
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- Can be disabled in situ for full games compatibility
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- Factory Installed & Tested 4Mb 32-Bit FAST RAM
- Expandable to 8Mb with Blizzard Add-4 Board
- Integrated Battery Backed Real Time Clock
- Easy Trapdoor Installation - no modifications required and does not invalidate the Amiga Warranty

(Please note, ANY 68020 board will disable the PCMCIA slot if fitted with over 4Mb)

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Add-4 Board - extra 4Mb for 1220/4 4Mb 32-Bit Fast RAM add-on	£169.95
Motorola Maths Co-processor 68882 PLCC type FPU, 33MHz	£59.95

THE AWARD WINNING A1200 RAM EXPANSION!

BLIZZARD 1230-IV

50MHz 68030 A1200 TURBO ACCELERATOR - 0Mb Expandable to 128Mb

The Blizzard 1230 MkIV Turbo Accelerator Memory Board
is the highest performing 68030 accelerator available for the A1200! With its 50MHz 68030 and MMU, the new 1230-IV offers EVEN BETTER PERFORMANCE at a LOWER PRICE! With a SysInfo rating of 9.91 (using a 60 Nanosecond SIMM) you can see the 1230-IV is **very** fast... a performance gain of up to 500% is achieved! Options via its Fast Expansion Bus include Modules such as a SCSI-2 Controller. An industry standard SIMM socket provides for up to 128Mb of auto-configuring 32-Bit FAST RAM (or up to 256Mb with the SCSI-2 option using its extra SIMM socket).



- May be disabled with Simple Keystroke on Boot Up for Full Games Compatibility, even with Badly Programed or Older Software!
- Battery Backed Self Recharge Real Time Clock
- High Performance Expansion with Full 32-Bit wide DMA
- PGA FPU Socket allowing Optional 50MHz, 68882 FPU
- Easy Trapdoor Installation - no modifications required and does not invalidate the Amiga Warranty

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4Mb SIMM RAM Expansion (Fast 60 Nanosecond) 32-Bit, 72 pin (*Call for Larger SIMM prices*)	£109.95
Motorola Maths Co-processor 68882 PGA type FPU, 50MHz	£99.95
SCSI-IV KIT SCSI-2 Module for 1230-IV and 1260 (With additional 128Mb SIMM socket)	£89.95

THE WORLD's FASTEST A1200 '030 ACCELERATOR!

BLIZZARD 1260

50MHz 68060 A1200 TURBO ACCELERATOR & MMU 0Mb, Expandable to 64Mb

The Blizzard 1260 Turbo Accelerator Board
offers Amiga A1200 owners FULL 68060 POWER with a board that simply plugs into the trapdoor slot! Now your A1200 will operate at twice or even three times the speed of an '040 based upgrade and up to five times the speed of a standard A4000! If you want THE FASTEST A1200 available, fit a Blizzard 1260 Turbo to your Amiga now!

- May be disabled with Simple Keystroke on Boot Up for Full Games Compatibility... Even with Badly Programed or Older Software!
- High Performance Expansion - Full 32-Bit wide DMA
- Battery Backed Self Recharge Real Time Clock
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The Blizzard 2060 Turbo Accelerator Memory Board
offers A1500 and A2000 owners the same specification that the Blizzard 1260 Turbo achieves but also includes built in SCSI-2! So, if you want the fastest A1500/2000 around with FULL 68060 POWER... fit a Blizzard 2060 to your Amiga now!

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By Andy Maddock



Computers, not porn

Following our preview of the excellent Capital Punishment, we received a letter from Mr Siemsen from Scotts Valley in the United States of America, and he wasn't too happy with the cut-out image of the bare-breasted warrior.

"Although I usually enjoy your articles in *Amiga Computing*, the review on Capital Punishment was offensive. I am not sure who was responsible for displaying the 'bare breasted warrior' picture (what kind of programmers do we have out there, anyway?), but it all points to the area of hypocrisy.

We complain that the Amiga is not doing well because of piracy, mis-management, etc. but as long as there is a constant degrading of women, and exploitation of children, in Amiga software, we have already limited our supporters. I am a concerned Amiga fan, and a subscriber to *Amiga Computing*.

It is such a shame to see a wonderful tool, the Amiga, used for violent and perverted playgrounds. There are a lot of Amiga owners who don't bathe in blood or have their brains between their legs. I am tempted to ask for a refund of my subscription, but you are the only connection I have to the Amiga World."

I'm sorry you feel that way Mr Siemsen. It may have been slightly childish on our part to present our readers with such a full-on image of this character. We feel that sexism will never be completely wiped clean from Amiga Software.

Think back to the early days of computer software such as Barbarian on the Amiga. The box clearly presented a damn near naked woman slaving to a huge muscular Barbarian. And what about the Leisure Suit Larry series. An adventure game whereby the whole object was to take advantage of women.

Times have changed and maybe it is time to see these things wiped clean from computer games. What does everybody else think? Write to us at the usual address. Meanwhile, you can read an interview with Alexander Petrovic the producer of Capital Punishment and see what he has to say about it on page 90 this month.

Hey look, I'm really Liam Gallagher

Last month we set a competition called "Hey look, I'm Noel Gallagher". We have already had a couple of entries, and remember there are games are up for grabs as well as a special sound product worth around £100. We won't tell you what it is – we'll just mention it's been lying around at the bottom of our cupboard for a good few months and nobody has used it. So it's yours if you can write a decent song – whether it's just lyrics, you playing guitar, piano, whatever. Anything goes. We'd also like to thank the people who have already entered and mention that all the entries we have received so far are superb. We've decided to extend the final date because we are sure we will be receiving even more, so once again... Come on!

System awards

Over the next couple of months we will be covering a feature to find the search for the greatest Amiga game ever. All we want you to do is fill in the following form and write down some answers – just to register your vote. Have your say in the great Amiga game debate.

THE GREAT AMIGA GAME DEBATE

Best game ever:..

Best Software House ever: ....

Worst game ever:..

Worst Software House:..

Best Newcomer:..

Name: ....

Address: ....

....

Send to: Amiga Computing, Amiga game debate, Media House, Adlington Park, Macclesfield SK10 4NP

☐ Tick this box if you do not wish to receive any promotional literature

Alien's on the Internet

If you read the magazine backwards you will have read the preview of the excellent Alien Breed 3D. If you don't believe the hype, why don't you connect up to Team 17's homepage and download a demo from their site. You will find a whole host of information of the game as well as playable for others such as Worms. So if you want to try it, download it.

The address is http://arse.arsey.arse.arse.co.uk

New games! Ooh, they'll all come out

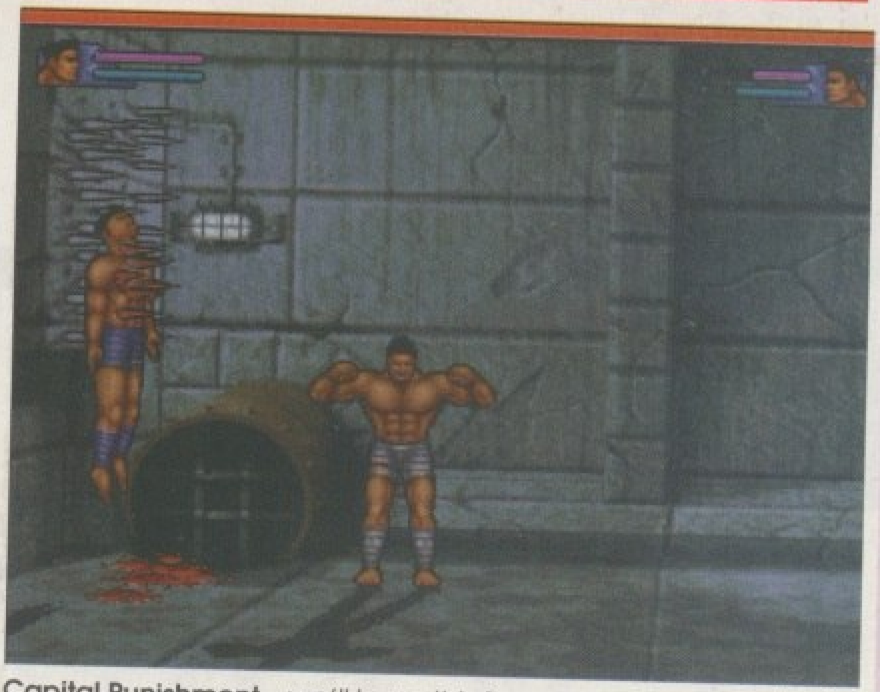
So what have all you Amiga gamesters got to look forward to over the next few month. We'll tell you...

Championship Manager 2 – we're still waiting for some news on this. The last we heard was that is was put back yet another month so it looks like we may hear something around mid April

NBA Jam Tournament Edition – this is rumoured to be coming out on the Amiga – who knows? More information next month. We promise.

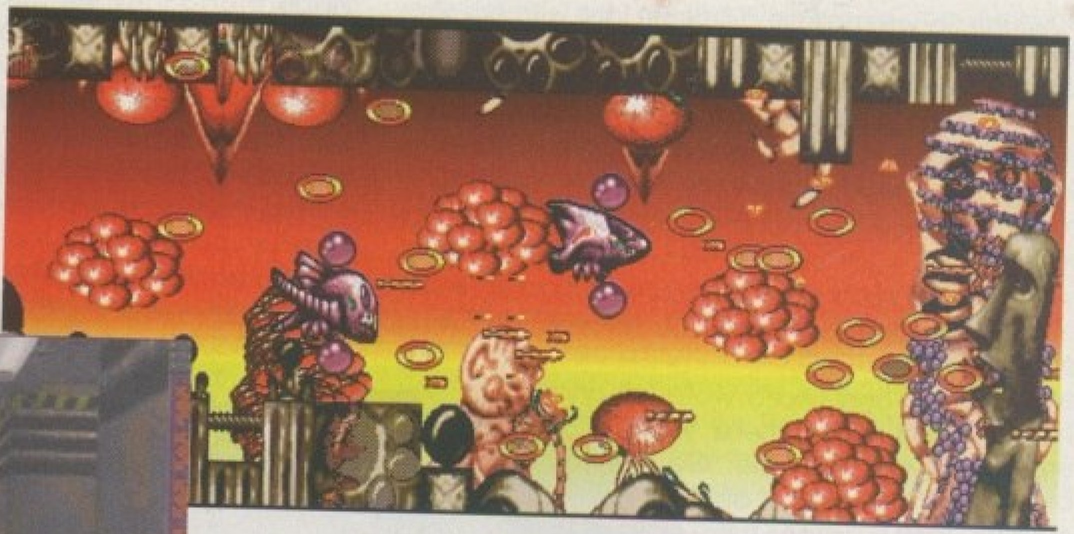
Legends – this adventure-like game from Guildhall Leisure should be winging its way into these pages next month.

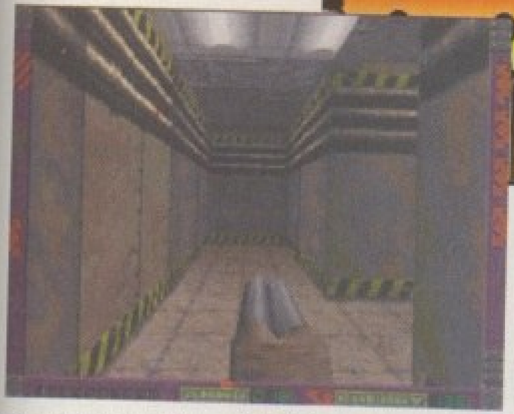
Total Football – this is another arcade football game courtesy of Domark, although I haven't heard anything for ages so don't hold your breath.



Capital Punishment – we'll have this for you next month, and the whole game will be on show at The World of Amiga show on 13-15 April if you fancy going to see it

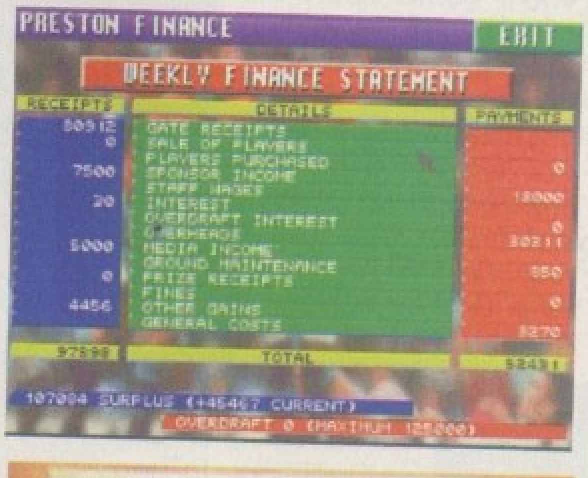
Atrophy – OTM are back to release the long-awaited shoot-'em-up – Atrophy. Let's hope it's as good as Watchtower





Alien Breed 3D – after the preview this month we should also have this next month – wait and see.

Tracksuit Manager 2 – we did a preview on this exciting new release from Alternative Software a while ago and we're still waiting for the whole thing.





XTR Data Disk – also from Guildhall is the reviewable version of the data disk for the excellent XTR.



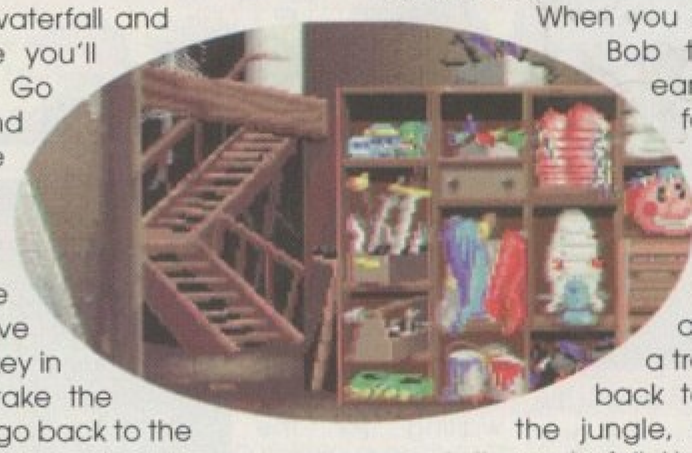
Flight of Amazon

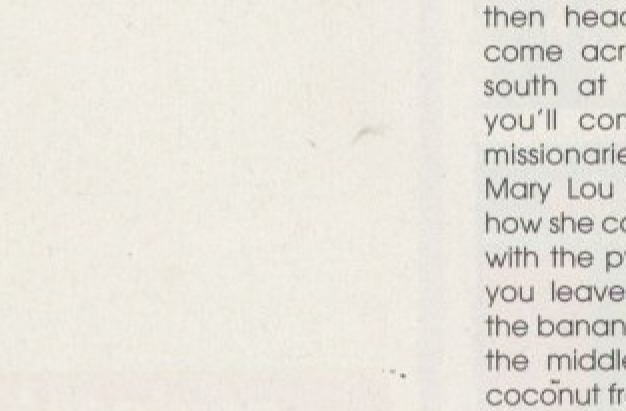
Thought we'd **forgotten?** At last we give you the next part of our **solution**

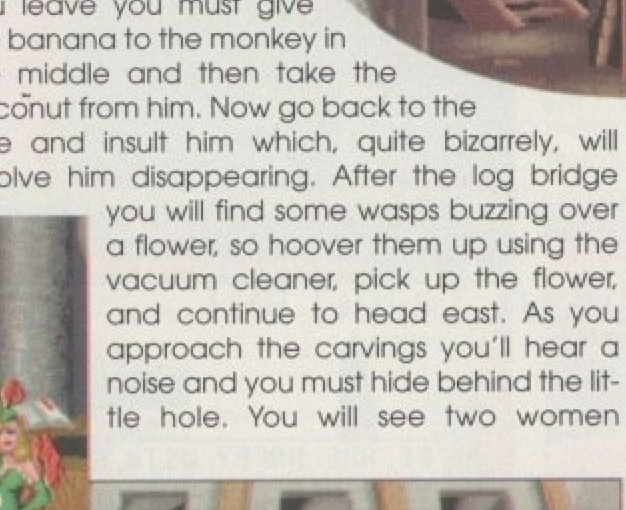
Alright! So we may be a little bit late with this second part of the complete solution. It's only because it's taken us this long to actually get anywhere. No, we're only kidding – we're really amazing at games and we complete them in hours. So there.

You notice the coupon inside the comic has been removed. Use this with the soggy coupon from the plane to view the plans and code for the pocket rocket, enabling you to work out Skip's message.

Now go and find a waterfall and then head east where you'll come across the ape. Go south at this point and you'll come upon the missionaries. Speak to Mary Lou and find out how she communicated with the pygmies. Before you leave you must give the banana to the monkey in the middle and then take the coconut from him. Now go back to the ape and insult him which, quite bizarrely, will involve him disappearing. After the log bridge you will find some wasps buzzing over a flower, so hoover them up using the vacuum cleaner, pick up the flower, and continue to head east. As you approach the carvings you'll hear a noise and you must hide behind the little hole. You will see two women appear and they will talk briefly before a stone slides across your hiding place. You will then find yourself in what looks like a dungeon. One of the men present will give you a glove puppet. Faye will then appear and she will release you because you are needed to rescue the princess.







You must now walk around the pool and go west and you'll be at the entrance to the castle. If you continue along the path you'll find yourself at the pinnacle. Now you must head towards Trader Bob's.

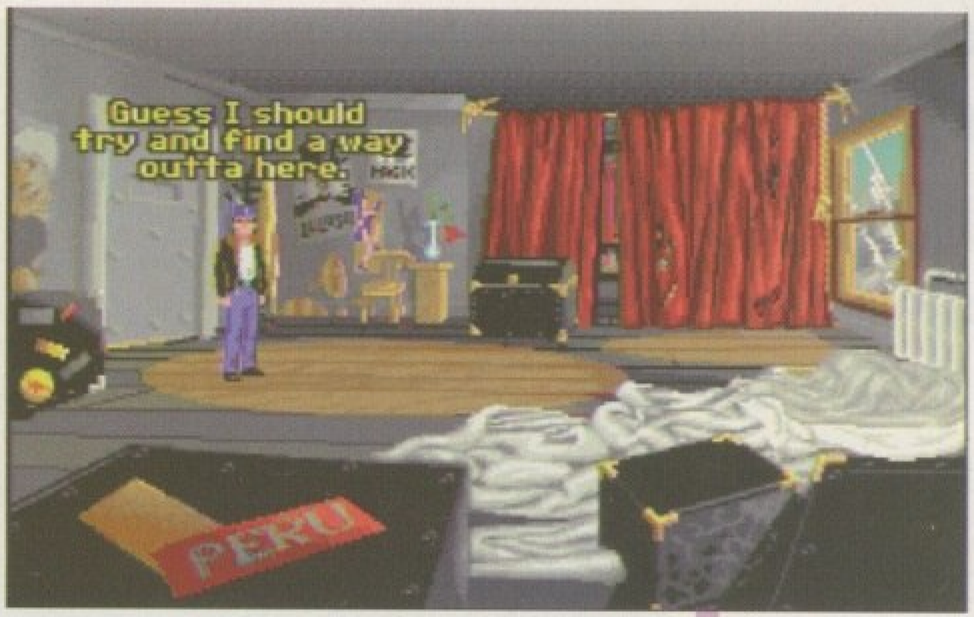
When you get there you must offer Bob the flower you picked earlier and he'll return the favour by giving you a net. Now go back into the jungle and give Sparky the comic book in return for a file.

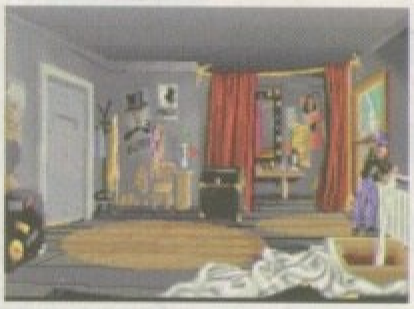
If you go south you will be able to get a banana from a tree, and then you must go back to the pinnacle and into the jungle, heading east until you reach the waterfall. Use your net to capture the beetle and then go and find the missionaries. Swap the file for the dictionary and go back to Trader Bob's and then swap the perfume for the scissors.

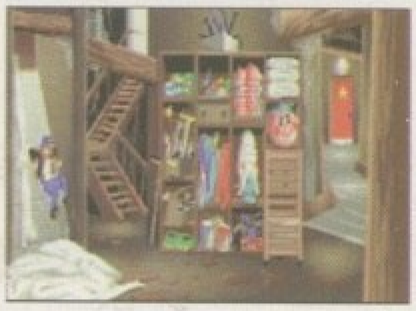
On your way out, talk to the witch doctor and you will discover that he needs some stuff to cure rashes. Give him the vacuum and he'll take out and use the wasps, then break the coconut and give him the milk contained inside. Get a flower from Floda and give it to the sloth who will start to eat it, whereupon you can use the scissors to cut some of his hair off. Now you can go back and give it to the witchdoctor so he can make the cure.

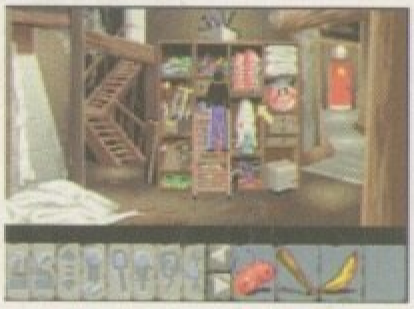
Once you have this, go back to the jungle and find Bud. He will pay you for the rash cure. Buy a record at Trader Bob's with your money then go back to Floda and talk to the receptionist – you must tell her you are the fumigator so she can let you in. If you walk north towards the library you'll

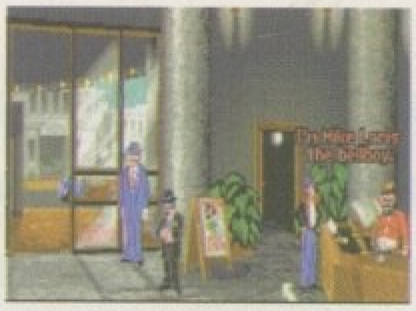
the Queen

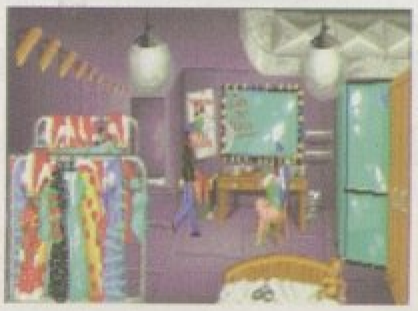












find some money under a cushion. Use the record on the record player to reveal a hidden lift. Forget about this for now and go through into the kitchen, and after talking to the cook, give him a banana which he will take away with him. Take the Cheeze Bitz and dog food from the kitchen and take the east exit into the sleeping quarters.

Open the mailsack and take out the letter to Private John. Now you must open the locker and take the toy. Go back to the library and get in the lift, and once it descends you must open the first door into the warehouse. Take the tin opener from one of the boxes. Now walk up the corridor and give the letter to the guard who will allow you to go into the rooms he was guarding. Go into the first room and remember one of the messages on the table. Leave this room and go into the other, and look at the roster to find out that the guard is guarding Frank's office, and that Henry is going to the kitchen for kitchen duty. Outside this room you will meet Klunk who will tell you that he was created by the Mad Doctor. Ignore him for now.



Go into the next room and tell the soldier called Henry that he has kitchen duty and that he should see Colonel Jackson, with which he'll disappear. Now you can access the guarded office. Use your knife on the book on the table to prise the book open and discover the key inside. Go back though the door and down the stairs, through the lab and upwards and you'll come to a cell door. Open it to rescue Princess Azura

Go into the foyer and take the pencil from the vacant receptionist's post. Use the mannequins to hide yourself and then ask Azura about the code and she'll do it all for you.

Now you must give the toy you picked up earlier to the dog, who will be nice and content as you open the door of the shed. You can't open the box inside so head back to the Amazon Fortress where you will be given a horn-like device. At this stage The Prof turns up and insists that Joe must go to Sloth Island. So off you go.

When you arrive at the pinnacle, head towards the jetty. The ferryman/reaper will ask for some bait so he can fish properly. Give him the beetle and he'll take you over to the island in return.

When you get to the island, go into the temple and you'll see a statue and some empty storage space, next to which there is an entrance - one of which you should go through. Take away all the bones which are left when you move the decomposed bodies. Now you can go back to the other room and put together a new skeleton in the relevant compartments. Put the arm which is left on the statue, put a coin in the slot, and pull the arm. Go to the entrance and you'll fall down the hole. If you leave the room you will have to go through the right-hand door and head northwards. Cross the bridge and talk to the zombie-type things until you persuade them to open the tomb. Now you can pick up the bandages. The women will then disappear. Open up the tomb and take the crown. Cut the vines to repair the pulley, then move it and you'll see a big drop which you must fall down.

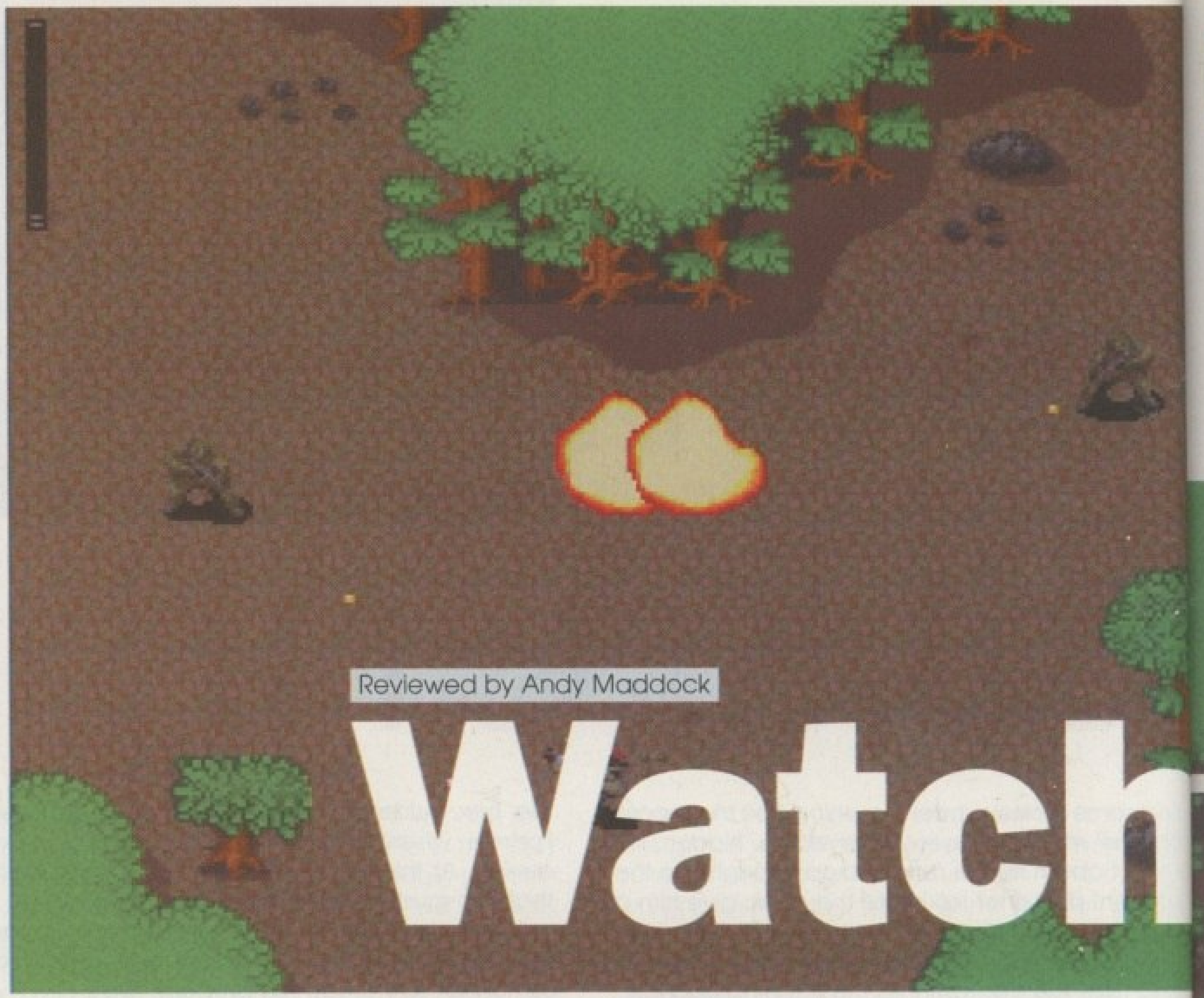
When you get up, use your knife to scrape some sap off the vine and head towards the fountain head, pick up the blue stone, and walk past the lever into a room looking down onto a guy trapped in a cage.

And we'll leave you to see if you can figure out the last bit because we're not going to let you cheat all the way. Come on! Put some effort in. Alright - if you get really stuck we may be persuaded to print the last part which you can put together with our previous parts and make a nice little booklet. Ahh.

GRAPHICS	89%
SOUND	87%
GAMEPLAY	89%
OVERALL	89%

Reviewed by Andy Maddock

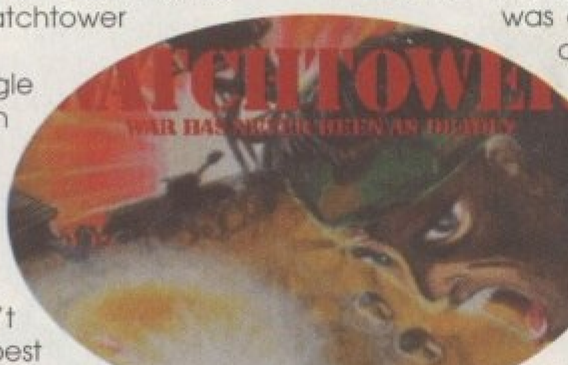
Watch



Two explosions over the top of each other. Surely that's not possible

We previewed this game last issue and if you've ever played Commando at the arcades then you'll know exactly what Watchtower is based upon.

A lot of companies struggle to get a foot-hold in the computer industry because they tend to launch an original idea which will only appeal to a minority of gamesplayers, and that certainly isn't where the money is. The best possible advice I could give to a software development team is take the simple ideas and inflict new technology upon them. This will undoubtedly appeal to the majority of gamesplayers. One of the all time greats was Commando – and it wasn't because of the technology at that particular time. It was all to do with competition. You could crowd a good six or seven people around an arcade machine who could quite happily take it in turns to try to take the top spot on the high score table, and if you did manage it you would be rewarded with instant fame and popularity with your mates and the birds.



Er, only kidding – because your mates will probably give you a good kicking in the car park for being 'too good.' Although the bit about the birds is true. CyberArts

PUBLISHER	OTM
DEVELOPER	CyberArts
PRICE	£29.95
DISKS	2
HD INSTALL	Yes
SUPPORTS	All Amigas



The briefings screen will inform you of what you have to do, so listen up!



You have to dodge every single bullet on the screen. If you get shot once you've had it

Speed test

One of the main down points to these games can be the amount of sprites in the screen. In the later levels when there are more foot soldiers and bigger tanks, there is a lot happening on screen all at once. Thankfully, Watchtower doesn't slow down one bit – and that was on a standard A1200.

Each of these soldiers takes two hits to kill and each tank, helicopter or bunker takes a good 10 accurate shots to destroy. However, when you do demolish buildings there will be power-ups waiting for you such as grenades, a shotgun or simply energy – all of them will help you in your mission at the end of the day. Each mission is topped off with end-of-level guardians which are not so easy to destroy because you have to dodge flying missiles as well as ground fire. It all boils down to reactions – you must be able to react quickly with the joystick while continually pressing fire. The enemy's bullets are bright yellow and move pretty slow so you shouldn't have a problem until later on.

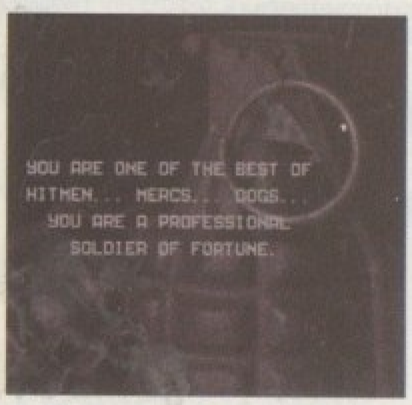
> “Watchtower excels in its playability. It's just like taking a trip down to the arcade to battle out a good few hours of Commando”



Look at those trees. Green aren't they? See if you can shoot a rabbit or something, er, I mean don't do that... ever!



If you collect that power-up you will receive a huge big gun which will allow you to shoot more people. Hoo-ray!



What do you mean “one of”. I'm the best me – I'm the best in the world me. D' yer wanna fight or summat?

the Finnish development team, are the masterminds behind it and are responsible for the outstanding explosions and effects. These are truly superb and although they don't make a game, they certainly add to the atmosphere.

As far as plots go it's the same old story. You are in big demand to help defeat some overpowering nation somewhere and your job is to face them and basically blow them off the face of the Earth with your pistol... hmm.

It's a sort of heroic story and if you manage to fulfil it you will be living in luxury and swimming in money for the rest of your life. So there's absolutely no pressure on you whatsoever.

There are six missions where you must take on the enemy which are all based over different terrains such as the desert, jungle and city. Each one has a varied amount of baddies and end-of-level guardians. The best parts of the graphics are almost certainly the backgrounds and explosions. The animation is smooth and the sound effects suit the action perfectly.

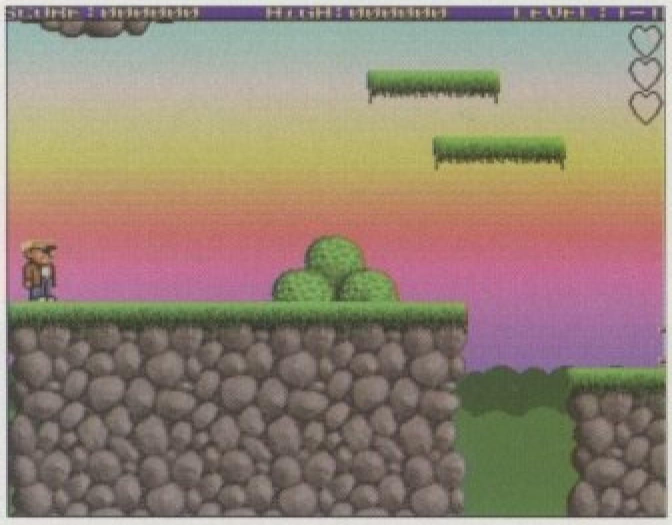
However, where Watchtower excels is in its playability. It's just like taking a trip down to the arcade to battle out a good few hours of Commando.

Final word

I can see people complaining that the originality of the top down, blast-'em-up has been lost – although I don't really care. If you enjoyed Commando you'll enjoy this. All you have to do is wear a ridiculously woolly jumper along with some tight trousers and some bright white socks, stick some 10p's in your pocket and stand up and play Watchtower – that should bring back some memories for all you kids out there!

GRAPHICS	72%
SOUND	63%
GAMEPLAY	60%
OVERALL	62%

PUBLISHER	NCR Software
DEVELOPER	Nevada
PRICE	£10
DISKS	2
HD INSTALL	No
SUPPORTS	A500/A1200



This, readers, is the afterlife. Strangely familiar, isn't it?



Look out for that spike, Charlie. You've only got two lives left, and we don't want you to die

The story: Charlie J. Cool is cool. A bit obvious, but the instructions remind me of this fact every few seconds, so I'll remind you. He's cool. He wears sunglasses all the time to prove how cool he is. He reads a newspaper called the Cool Times. He's stupid. And following an unfortunate piano meets head incident, he's also quite dead.

Finding himself in some sort of weird limbo, he meets God and realises he's been grim reapered too soon as they don't know if he's Heavenbound or going down. The only way to sort things out is for him to travel through Midway. At the end of this quest, he'll have proved himself worthy of Heaven or Hell and everything is hunky dory. So, God swings open the door and shoves Charlie into Midway. What wonders await our hero? A platform game. That's what the afterlife is like, apparently. Something to look forward to, eh?

So, yes, it's not terribly original, but then what is these days? Basically, you've got seven realms of Midway to plough through, with four levels in each. In each level, find a key and get to the far right-hand side of the level to proceed. Each successfully completed level sweeps your brow with a special password-shaped duster, there are power ups to fiddle with, and special bonus rooms lurk about the place like great big lurking things.

All well and good. But what unique trousers does this game wear to make it stand out? Well, remember that you must prove Charlie to be good or bad enough to go to Heaven or Hell. In each level there are creatures who are out to bite your eyelids and generally hurt you, and there are some who want to be your friend. Kill baddies and your karma goes up, squish your sicky mates and karma is lost. At the start of each level a meter shows you how you're faring karma-wise and the content of the last level depends on whether or not you're good or evil. Which is nice. Apart from that though, it's an idea free zone.

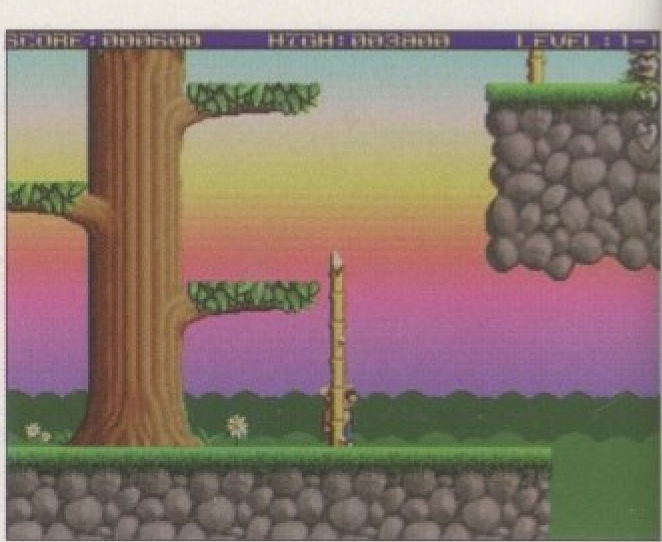
There are, however, some bad points. Bad points which rampage through the good points

Secret lemonade drinker

In accordance with EC platform game law, Charlie J. Cool features secret rooms. But, unlike most games, you can't actually see the rooms. Whereas most games leave little clues – a section of lightly coloured wall, a platform that leads nowhere – Charlie's rooms are invisible. Unless you find a special icon that reveals their locations. Not a bad idea but, personally, half the fun of a platform game is working out where the secrets are. Take that pleasure away and it makes the game even less fun.



I bet you wish that you were this cool, don't you?



Charlie tries to hide from my cruel comments. Come out, you fool, I love you really.

Charlie J. Cool



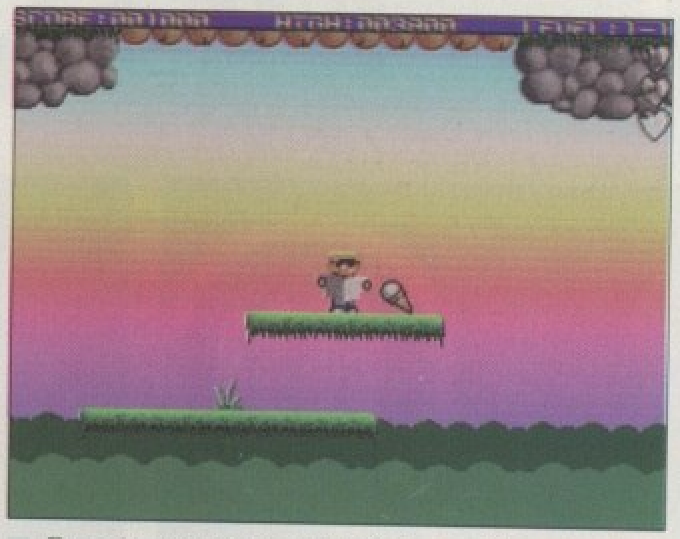
Reviewed by Dan Whitehead

Charlie J. Cool is only available via mail order. Send a cheque for £10, made payable to Neil Cousins, to:
NRC Software Inc.
131 Gunnersbury Avenue
Acton, London
W3 8LE

like some crazy bison. First up is the satanic stinginess with lives. Three hits and that's it. Game Over. You can pick up extra lives, but they're few and far between. Admittedly, this isn't a huge hardship as the game isn't overtly difficult, but combined with the other flaws in Charlie's sack of badness it's enough to cast doubts on the game's worthiness.

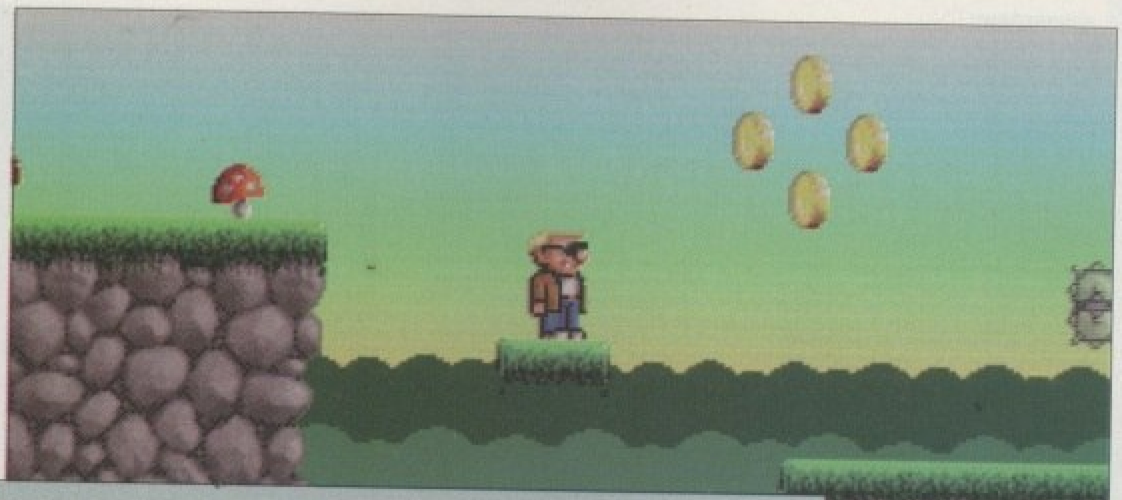
Flaws like the lack of a continue option. Every time it's Game Over (after only three hits), you have to retype the password and start the level again. This soon leads to aggravation, especially as the collision detection can sometimes seem a little wanton. And the ironic cherry on top is that to play the final level you have to play through the whole game without using passwords. That's 28 levels on only three lives. It had better be worth it.

Now after those gripes it might sound like I'm slagging the game off. Well, actually, I am. But I don't want to. Underneath all those pointless annoyances lies a pleasant platformer – it might not change the world but it's fun. At least for a while. In fact, it reminded me of that golden Team 17 oldie, Superfrog. Very similar level layouts, similar controls, similar objectives. The only difference is that Superfrog was covered in nice shiny playable bits, whereas Charlie J. Cool is covered in niggly bits that make you grumpy. It is cheap, at only a tenner, but even this doesn't make up for the fact that after an evening spent in the company of Charlie J. Cool I wanted to tear my hair out and smother him with it.

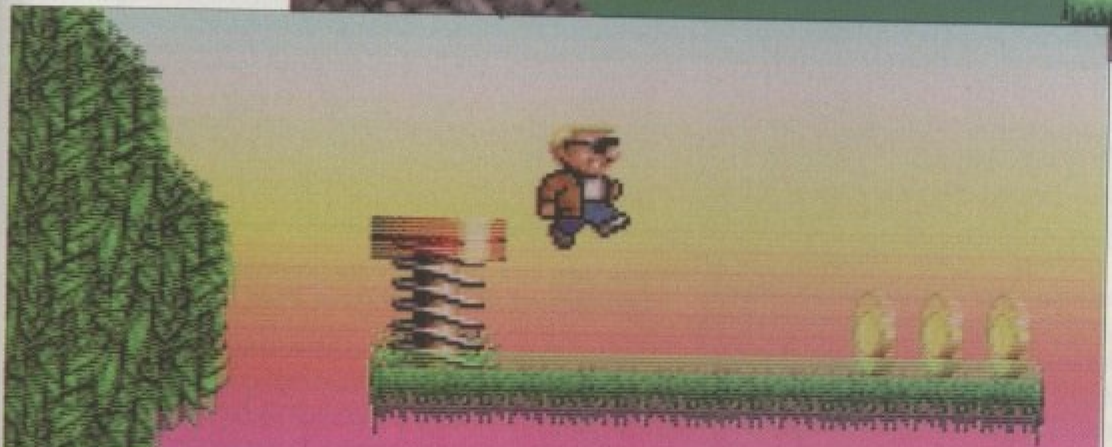


Even Charlie get's so frustrated that he simply stops everything and reads the paper

‘There are, however, some **bad** points. Bad points which rampage through the **good** points like some crazy bison’



Mushrooms, hovering coins, yes it's platform clichés all round



Giant springs send you shooting into the air, usually to land on a spike or some simliar trauma

Final word

If you're a fan of platform games and simply can't sleep until you've played them all, then a tenner is a small price to pay. However, if you're a highly strung person, avoid this game like the plague. Despite it's pleasant, if rather dull, gameplay, this is strictly for masochists who love to be frustrated to the point of combustion. A pity really, as deep within lurks something quite good.

Definitely Maple

by Andy Maddock





This latest Amiga offering just proves that Oasis aren't the only ones making it big across the Atlantic

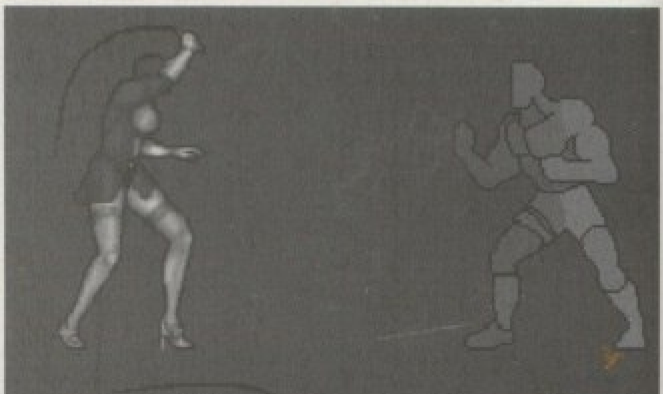
Last month we covered a preview version of Capital Punishment – the no holds barred beat-'em-up created by clickBOOM, the development team derived from a 25-year old, Toronto-based graphic design company by the name of Pxl Computers.

Capital Punishment's producer, Alexander Petrovic, formed his team from experts in the fields of programming, art and music in 1994. Commodore's saga was unfortunately taking its toll but clickBOOM braved through the storms and carried on with their project, not knowing what the future would hold.

They were designing graphics until around midnight and if they weren't happy with them they wouldn't pack everything up and go to bed, they would work through the early hours of the morning because the job required dedication – and if anyone has the dedication it's clickBOOM.

The whole purpose was to create 'ultimately playable video games' that would bring everything good about the arcades to home computers. Namely, the Amiga.

I spoke to Alexander Petrovic to find out more on his quest to bring the world's greatest fighting game to our screens. I began by enquiring about what his job entails: "Before we started work, my job was to find the talents that would produce a high quality action game." He continued: "since



You can see here how the various frames of the bare-breasted warrior have been strung together

then my job has been the development of new ideas, solutions for problems, and finally to ensure the quality of every aspect in the game."

I heard about Capital Punishment about three or four months ago, but Alex explained it had actually been in production almost a year and a

Why Capital Punishment?

When developers sit down together and try to dream up some original ideas, these are the most time-consuming moments as ideas are always difficult to come by. I asked Alex how the idea for Capital Punishment came about.

"Our first idea was something completely different. When I assembled the clickBOOM team, we sat down and started discussing what type of game we'd like to make. It was immediately obvious that we had to make a fast action game, because we all felt that way – but fighting certainly wasn't our first choice. Or at least not mine.

I was thinking about a 3D game where the player could control a bunch of Commandos through the jungle, the goal being to assassinate different criminals and drug lords hidden deep inside the jungle. However, the rest of the team thought the game wouldn't be action packed enough – and they were right.



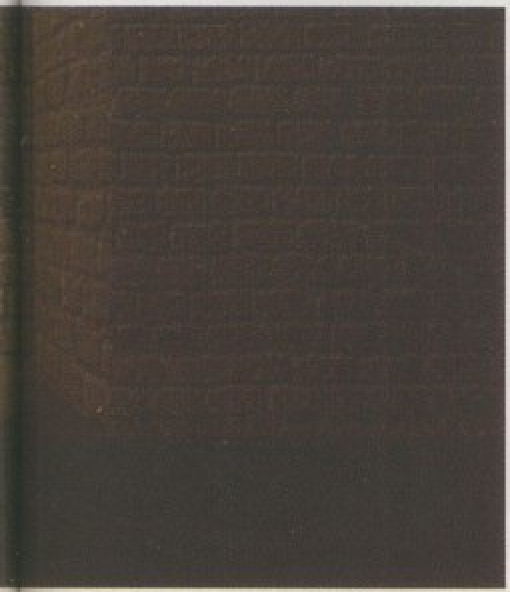
Here's a look at that very first attempt at programming a routine which may be incorporated sometime in the future

We tried it and it looked OK but I realised it shouldn't be our first game. Consequently, Capital Punishment was eventually born.

> **"** The purpose was to create ultimately playable videos games that would bring everything good about the arcades to home computers **"**

half. "We are paying attention to a lot of detail so that it would be playable and long-lasting."

Alexander believes their big break came at the "World of Amiga" show in Toronto last December. "Although we started working back in 1994, only a few people knew about us. I felt that exposure at such an early stage would slow us down, so we waited until the World of Amiga show for the world to find out about us, and that's when we believe we were officially established as a developing team."


This is the first background which the graphics artist wasn't particularly happy with...

... so he changed it to this which, as you can see, was definitely the right decision



Before the Amiga show, not everything was running to plan. "On the first day of the show, after the president of Amiga Technologies, Petro Tyschyschenko, addressed the public, our stand had been covered with beautiful 'clickBOOM' posters, although we didn't have a single Amiga on which to show Capital Punishment because our equipment hadn't turned up." He continued: "we managed to borrow one from an employee of an interested company and just as we managed to connect everything up, Mr Tyschyschenko paid us a visit, we showed him the demo, and he was very impressed – especially after hearing that it worked perfectly on a unexpanded Amiga A1200.

After the president of Amiga Technologies visited, the public began to spark interest. "By the end of the day, we were giving away free demo disks to all who wanted them. On the Sunday we had a Capital Punishment tournament. Two brothers managed to reach the final, with one emerging victorious after seven rounds. He will receive a free copy of the game once it's available in

Eighteens only

As we've already seen, the game is violent. At the moment Alex thinks Capital Punishment should carry a certificate. "It will certainly be more violent than the demo everybody has already seen. We do not want kids to buy this game, it has been intended for mature audiences because the style of fighting is real – there's no flying, extending arms, turning into hurricanes etc. Capital Punishment is realistic and that's what scared some of the people within the industry. Capital Punishment received only a few letters about the disapproval of the game content – however, these weren't targeted at the violence but at the girl: "If you think your parents would object to seeing a bare breasted women with a whip, as she is in the demo, please do not buy the finished game because she is a nasty character."

clickBOOM will probably be noted for being totally committed to the Amiga because they are one of the few who have braved through even the most challenging of times: "We had a choice of rushing the game for Christmas or taking time to do things right. Basically, there was no option. All we wanted to do was make the best fighting game and there was only one way to do it – sit down, work, and try not to think about the time.

So, in the end we did not try to make Christmas, although by now the game will be twice as good and I think the players will appreciate that.



Two of clickBOOM's developers are actually kick boxers, so you can see how accurately they have drawn the moves



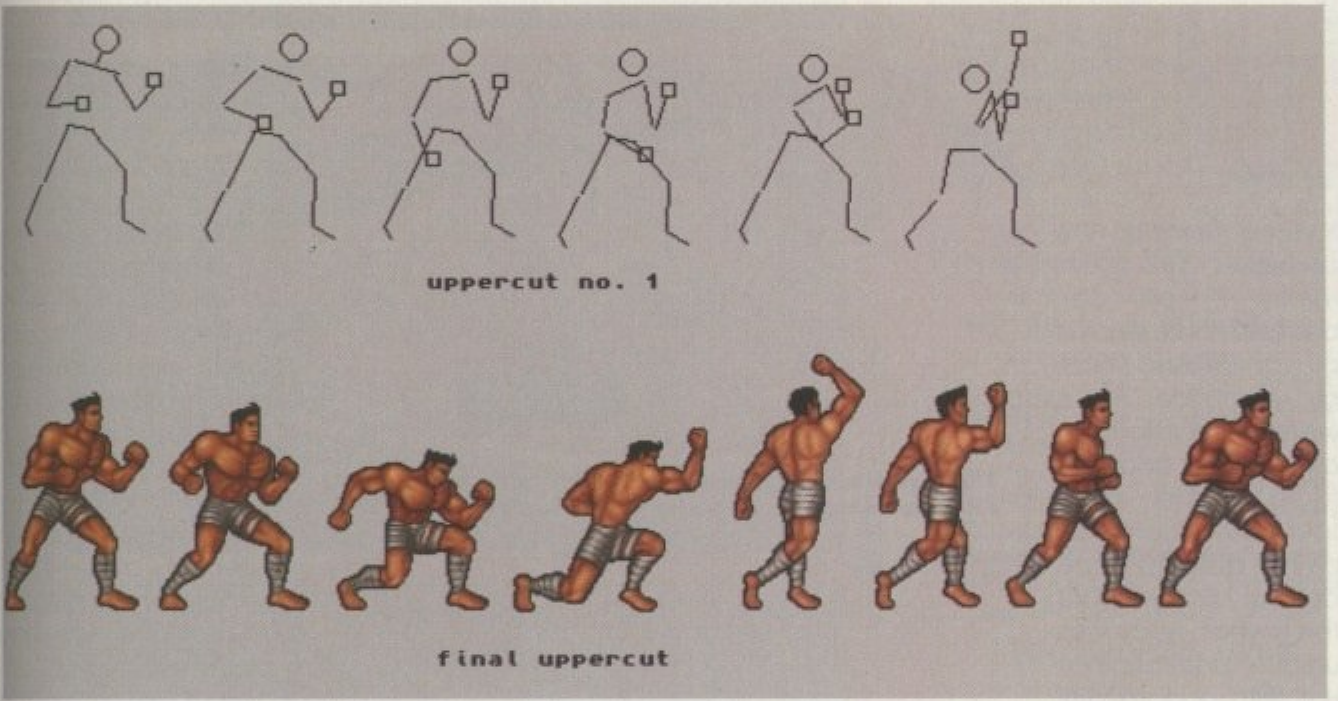
stores." Following the feedback they received from everyone involved, Alexander saw the show as a valuable experience. "It gave us an opportunity to talk to players and, as a result, we were able to gain some valuable input as to what the public would like to see in the final version. Moreover, the show served as a testing ground for software bugs, and we are happy to say that Capital Punishment passed with flying colours." Obviously, in Canada the games market is certainly not what it used to be – especially with the Commodore episode – so I asked about the games scene over there. "At present, most North American computer users do not have the slightest idea what the Amiga is. We don't really have many Amiga stores here anymore. Since Toronto is

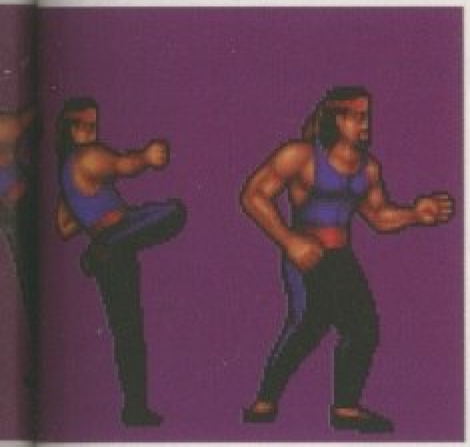
Stopping piracy

One of the major issues affecting developers and publishers alike is, of course, piracy, and Alexander also believes it is unfair: "We are thinking of using a new scheme. If the protection detects that a game has been copied, like a virus, it starts spreading information on other disks and programs without the person who pirated it knowing what is happening. It would start causing minor and then bigger problems with software."

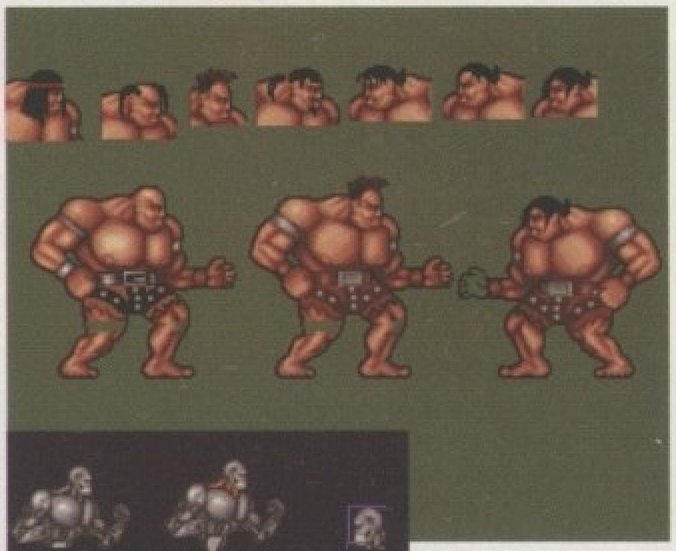
The current Amiga games scene is reputed to be at its weakest level, so it seems odd to be planning and releasing such a huge game. "We will see what happens with sales. If the best fighting game for the Amiga does not sell well, then all Amiga users are in real trouble because that will mean pirates have really killed all hope for good Amiga-specific games."

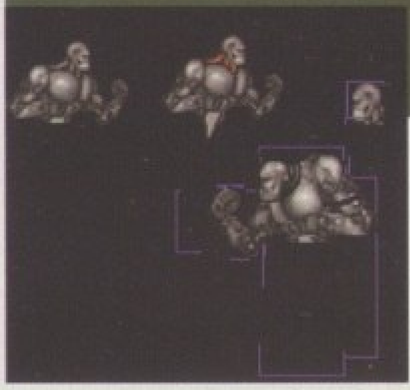
The main competition for Capital Punishment will be Body Blows, Mortal Kombat and Shadow Fighter, but can Capital Punishment offer us something new? Alex believes there is not a single fighting game more playable: "We tried to get away from the mainstream Amiga fighting games where you have a lot of characters, with only a frame or two per move. Those games look like cartoons and play like that too. Capital Punishment, on the other hand, is real combat – you have to learn tactics. We tried to create a real atmosphere in the game through our special effects so you actually feel part of the scenery. Capital Punishment will offer Deforming shadow effects, lighting effects, subliminal hit screen-flashes, different traps on different levels, hand drawn frames for 25 per second, stamina and fatigue. And this is just what we've put in the demo. The remaining features will be have to be kept a secret until the game release."





You can see here how the designers have used wire frames to base their characters on





The background scenes are probably the best seen since the Shadow of the Beast series

a big city we are lucky to have several Amiga stores, but in any smaller town, Amiga hardware selection is non-existent. If they do need a piece of software or hardware they really don't need stores on every corner – they will find their product and mail-order it."

In my opinion, Capital Punishment is already looking outstanding, and clickBOOM are already considering moving onto other formats such as the PC, Playstation, and Saturn. "Our original plan was to have Capital Punishment on the Amiga and then, after a year or so, on other platforms. That's how it's been done with all important games developed for the specific system. After the initial hype of six months to one year, they produce a conversion for other platforms.

This seemed the right time to mention what they thought the future may hold for them. "The topic of the Amiga's future has been the focus of much debate. Two years ago, most people were convinced that the Amiga would not survive a year without Commodore. Well, here we are in 1996 and that prediction has been proved false. The Amiga is alive and well, users still adore it, and we now have the best fighting game ever."

Alexander believes there is enough talent out there to produce plenty of games during the year: "When we began our project we ignored the scepticism that was present within the Amiga community and decided to solely concentrate on work. It was our opinion that the Amiga, quite simply, could not die."

Final word

I asked Alex if he had any final thoughts. "Making games is the best job in the world for all of us, and you can see that from the quality of the game. However, the road to Capital Punishment was hard, but also very entertaining. It's obvious how much we enjoy this work and we will always take time to think and produce playable and enjoyable games."

The finished project will feature modem play, more special effects, upgradeable moves as you progress, sampled speech throughout the game, and some configurable options such as stopping the two fighters passing each other on-screen so they can push against each other, and timed fights.

We will hopefully be able to bring you a full review of this already eagerly awaited game very soon.

‘Making games is the best job in the world for all of us, and you can see that from quality of the game’



XTR
Data disk

Previewed by Andy Maddock

> ‘ The whole disk consists of the editor and you will also be able to use graphics boards and set the number of colours and even multitask ’

Two months ago we reviewed Guildhall's excellent racer Xtreme Racing. We awarded it quite rightly 91 per cent because of its excellent playability and the multi-player option. The graphics weren't particularly outstanding and featured some mad touches such as being able to race against a sheep, but this is what made it so unique and original. But with a data disk being announced by Guildhall Leisure, we'll have to wait and see if the silliest has just got sillier.



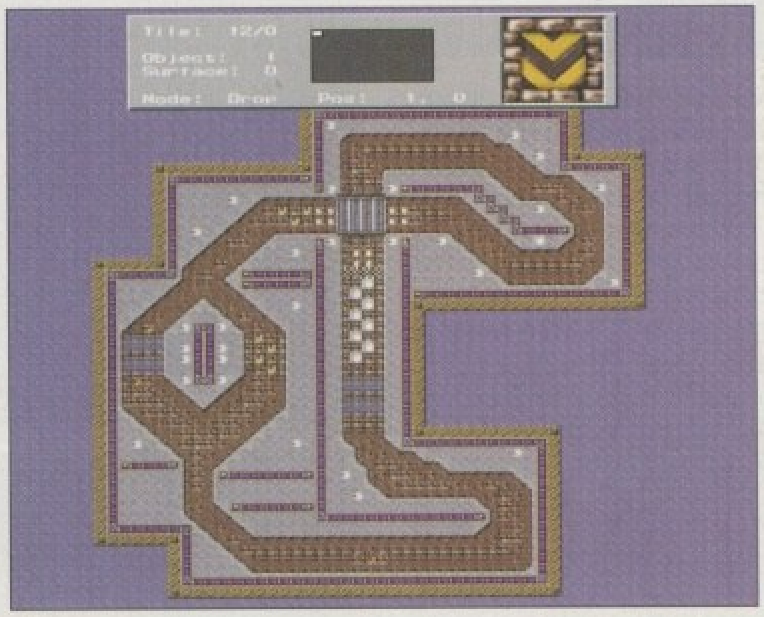
The love track. Woo ooh ooh! I don't quite know the thinking behind this. Maybe it's for Amiga lovers. Hoo!

Usually we wouldn't cover a preview of a data disk but we felt you had to know about this because it was such a good game. Basically, the data disk features some beefed up graphics for the A1200 and it's due to be released soon. So if you've got FastRAM you're in for an extra special treat.

When we previewed XTR about three months ago the development team weren't sure whether to include a track editor, and when the reviewable version appeared it was clear it had been put to one side to add to a data disk in the future. Well here it is.

The editor is obviously the main addition and you will be able to re-design all the boundaries, computer car routes, drop down points, surfaces such as road, water and grass, and finally you can add your own secret paths.

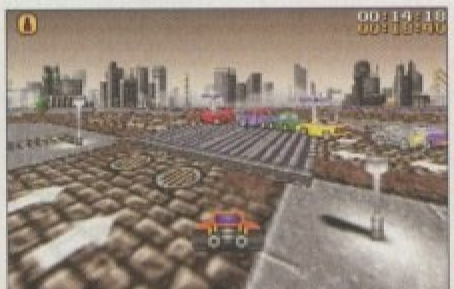
The whole disk consists of the editor and you will also be able to use graphics boards and set the number of colours and even multitask You will be able to design the graphics completely rather than just the tracks and will be able to select palettes and so on. There will also be a full on-line help as well as a quick start guide, and to top it off there are five new pre-defined tilesets and object sets which even include Elvis!



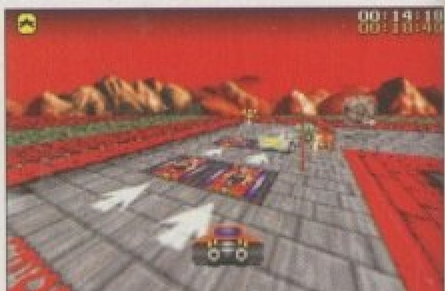
As you can see, the track editor will be a superb edition which will give you endless opportunities to play XTR



Have you always wanted to race around Lego land. Make sure you don't crash into any houses – they take ages to build



You can also race around Batman's home town – unfortunately Robin's nowhere to be seen!



The scary lava ridden track will be by far the most exciting of tracks with monsters and things

Insight

There are a series of cosmetic additions which consist of beefier explosions, two completely new weapons, four player joystick support, saved lap times, and updated presentation screens. The full tracks are Hell Below, Lurve Land, Gotham City, Duplo Bricks Land, and the Babylon 5 World.

As I mentioned it's going to be released pretty soon. The finishing touches will be applied and then you can update your copy of XTR to improve it even more!

SYSTEM
review

GRAPHICS 91%

SOUND 89%

GAMEPLAY 92%

OVERALL 92%



Tottenham against Liverpool is always a game which provides many goals – except this one



The team selection is the same as it has always been. You can access all relevant team details from this screen

Reviewed by Andy Maddock

Premier 3 Deluxe

PUBLISHER	Gremlin Interactive
DEVELOPER	Realms of Fantasy
PRICE	£tba
DISKS	3
HD INSTALL	Yes
SUPPORTS	All Amigas

When Premier Manager first came out I remember playing it for around 12 months non-stop – unfortunately I'm not kidding. I managed to take then non-leaguers Wycombe Wanderers to the height of Division 1 football and when my contract expired and I took on the job at Manchester City, over the next few seasons I managed to win every domestic and European trophy on offer. This was the exact point I thought "Right! Where's my social life gone?"

About a year later my appetite was to be dangled over the freshwater lake that is Premier Manager 2. Although underneath the same game existed, it featured some superb match sequences and generally it had been polished up graphically. I didn't spend as long on the second version, mainly because I'd seen it all before and it was just too damn hard. I managed to take Halifax Town to Division 2 when I was offered a job at my local side Stockport County and from then on I failed miserably.

When Premier Manager 3 came along I knew that after two previous versions, if anyone could strike up the perfect game then it had to be Gremlin.

So what exactly is Premier Manager 3 Deluxe? Well, it's a like a luxury version of Premier Manager 3 because it comes with the much fabled Multi Edit System which allows you to alter everything in the game, be it team names, player names, ratings, league structures – the lot. Also, the actual editor has been around for some time but only now have they decided to bundle it in with the full package.

I think a Premier Manager 4 version of the game isn't the answer because surely Gremlin would be pretty hard pushed to find completely new ways of presenting the same football simulation. Consequently, I think the right

All change

The Multi Edit System is based along the same lines as the actual game. The icons appear at the foot of the screen and you can cycle forward and backward through the various values by the left and right mouse buttons. In all you can edit the teams, managers, kits, players, ratings, ground capacities, ticket prices, ground name, safety ratings, and league tables, and you can even edit how long you'll be out for a broken arm. You can also edit your start position so you don't have to begin your career in the conference – you can zip straight to the top in the Premier League. The whole system is really easy, efficient and user friendly because you can swap players. Usually in editors you have to enter all the new data via the keyboard which would take absolutely years, although in PM3 MES two teams appear on screen and you can select with the left mouse button and swap with the right. It's that simple. If you can navigate the actual menus in the game you'll be able to update the information.

> ❛ It's like a luxury version of Premier Manager 3 because it comes with the fabled Multi Edit System ❜



The main menu can be configured as much as you like by changing the background colour



The telephone is the manager's best friend. All your transfer information and contracts are here



You can output any of these screens to the printer so you can look over your team's performances in great detail

Manager

idea was updating all the information and re-releasing it, so if you haven't already got it you can buy the whole updated game, although if you already have it you could invest in the Multi Edit System and update it yourself – if you have the time.

There are no additions to the actual management side itself – the new 95/96 teams are the only addition. For instance, you will now find Juninho at Middlesbrough, Asprilla at Newcastle, McAteer at Liverpool, and all the updated league structures and rules. On your substitution bench you can have three outfield players and sacrifice the goalkeeper entirely from the team, therefore if your keeper gets injured or has to take an early bath you will have no other choice than to stick an outfield player in goal. Considering how well Steve Nicol did for Sheffield Wednesday and Vinny Jones for Wimbledon, I wouldn't bother.



Look even the ticket prices are correct





As you can see, Liverpool are unusually placed around mid-table – although they'll probably still win the championship

Final word

Right, I am going to award this game on the merits of the package itself, not as a sequel to the original Premier Manager 3 because it's no different. Do not buy this whatever you do if you already own Premier Manager 3. Otherwise go out and buy one today!

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[illegible]

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ens running round at supersonic speed trying to pick up eggs and take them back to your nest. All this going on with a hardcore rave track as backing.

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[illegible]

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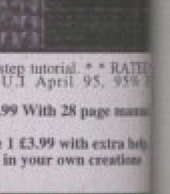
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Alien Breed - The Killing Grounds

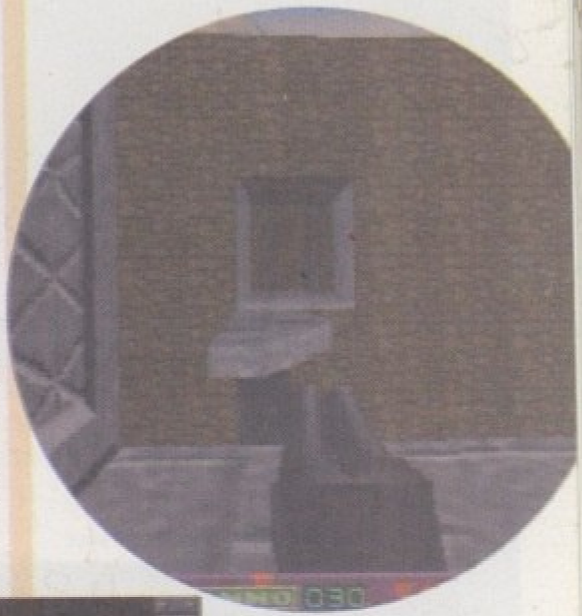
Previewed by Andy Maddock

The first Alien Breed was a phenomenal success leaving gamesplayers gasping for air - and not only this as last month it was awarded 'Best Doom clone on the Amiga' when we compared them all to find out the true champion.

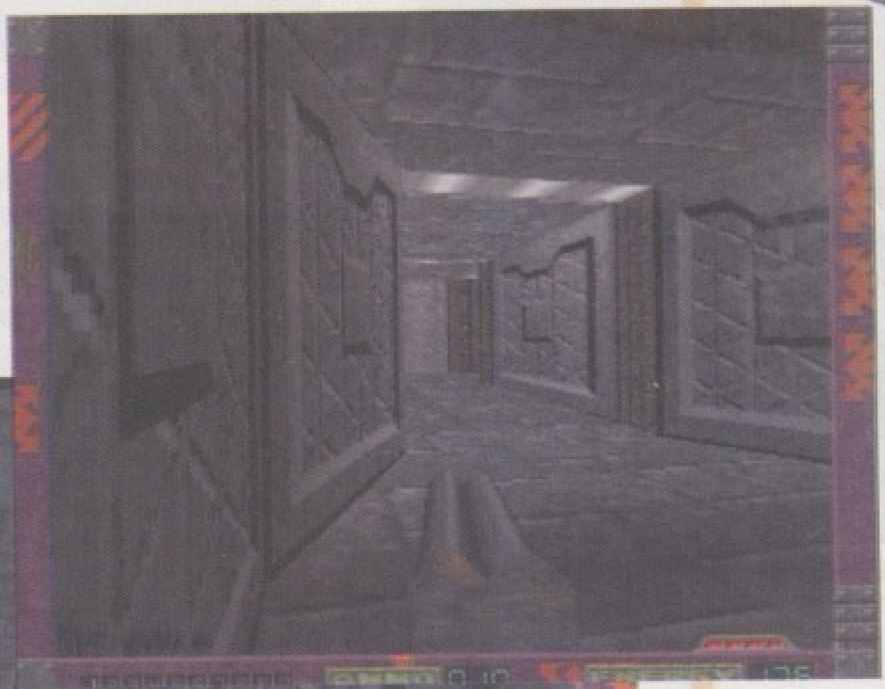
Finally an early version of the sequel has arrived and we can now answer a question which has plagued computer journalists for years. Are sequels as good as originals?

Some may argue that the developers have dipped their toes in the water and tested the temperature, so they now know if they should put it back in. Some find it just right, some find it far too hot. (That's a good analogy - I just made it up.) If the temperature is just right a sequel may be in order, although this may stray away from the original too much, producing not so much a sequel but an entirely new game. To the other extreme, they may want to keep the basics of the original game and just add some features here and there, so the sequel may not warrant a full release. It's a difficult job to manage a sequel but if someone can do it, it's got to be Team 17.

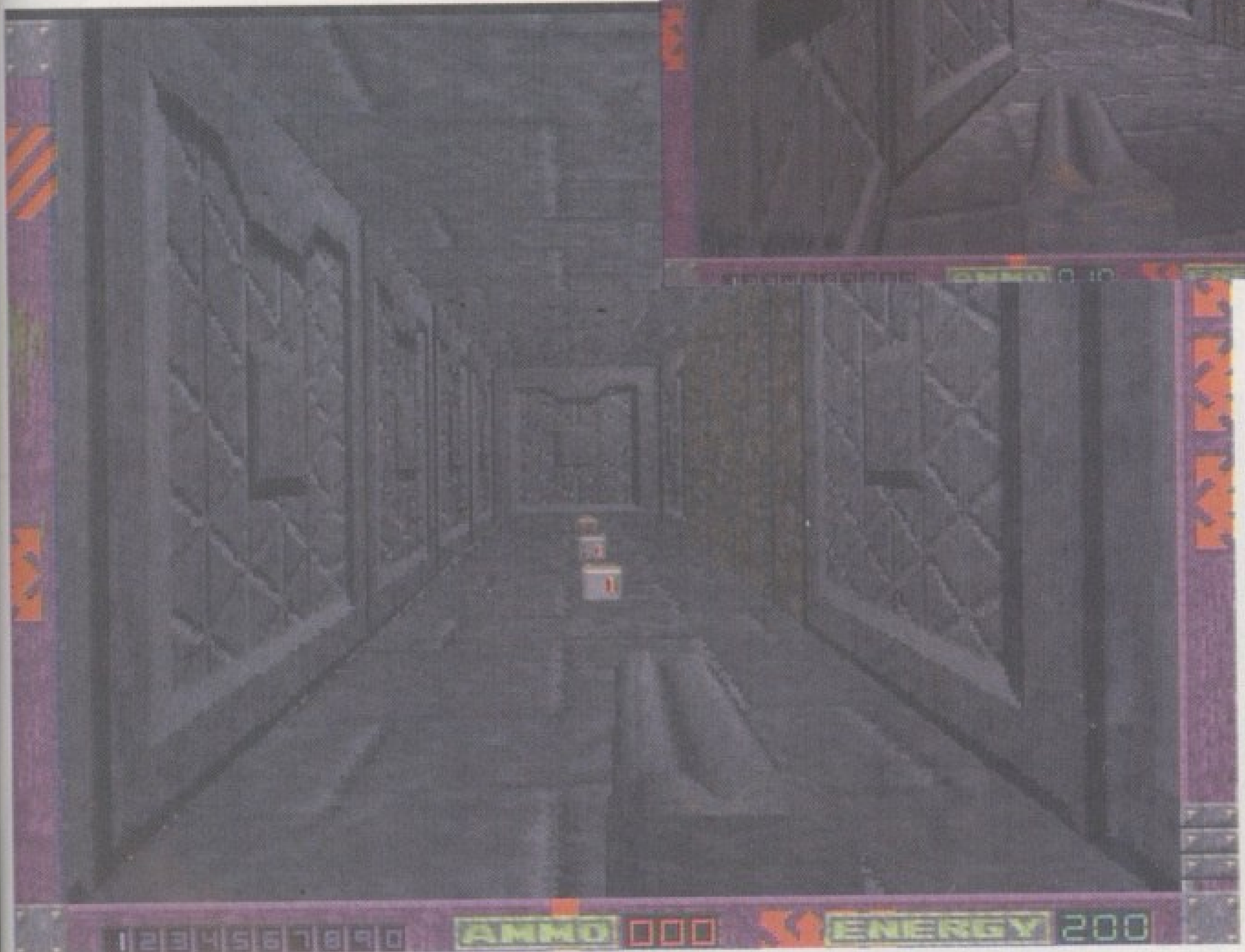
You are still Captain J T Reynolds from Alien



Will you be able to make the jump or not? That's the question. I haven't managed it yet, but it's possible

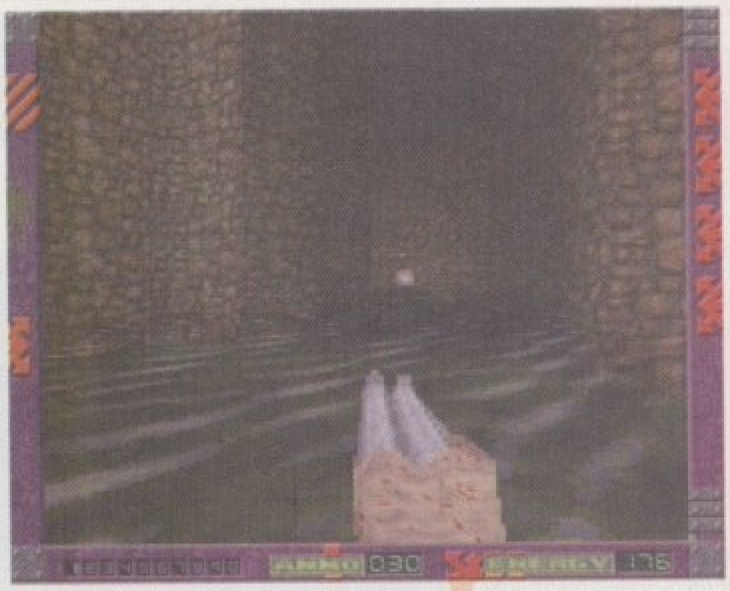


Oh no, those big beasts are gonna come around the corner any second and I'm not ready

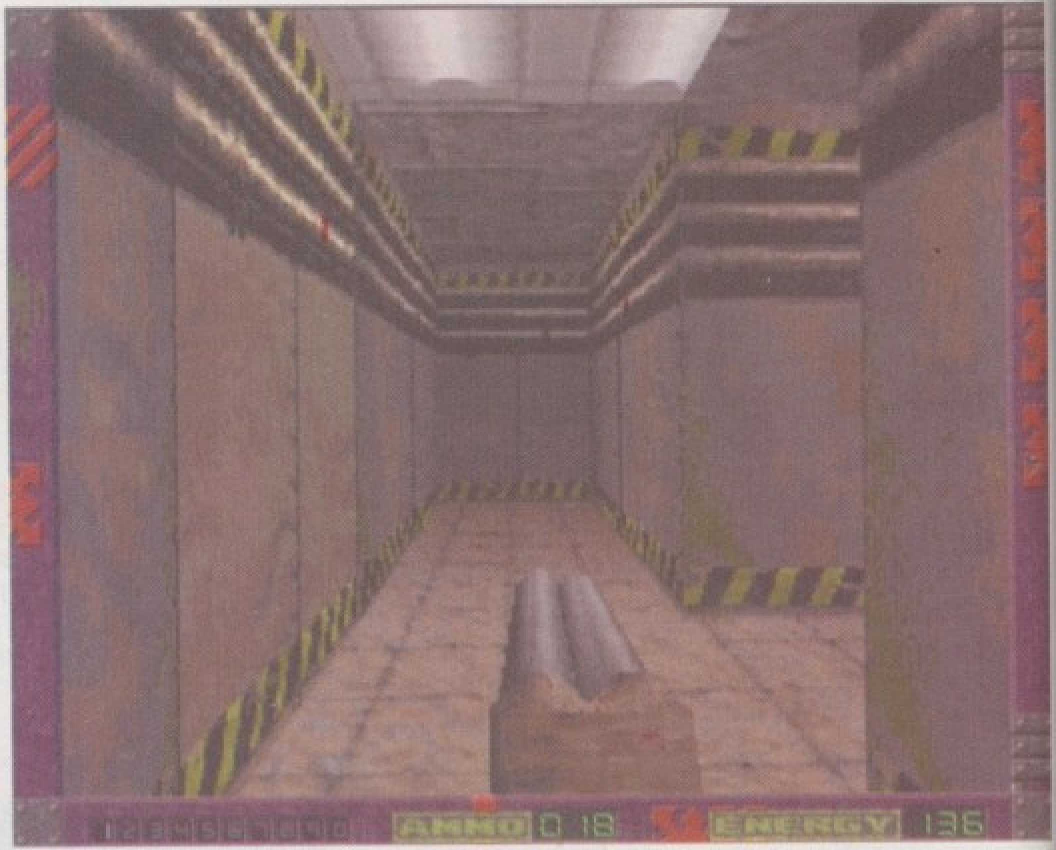


You can see from this screenshot that the graphics are better than Doom on the PC or Playstation

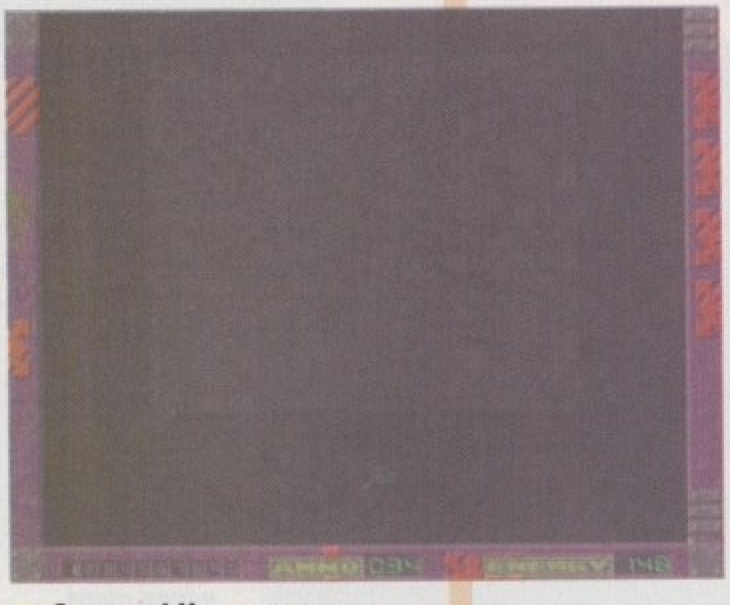
‘From what we've seen the game is looking absolutely superb. Alien Breed 3D 2 is better than Doom’



Right! I'm soaking wet through and my gun's gone all funny on me. What do I do?



Ooh, this is a scary alien bit because it looks like a scene from the film Alien



Come on! Use your eyes. Surely you can see you are in dark tunnel – you can just make out the steps... I think

Breed 3D and have awoken on the medical bay of the giant battlecruiser which was sent to destroy your previous vessel Osiris 3. This giant battlecruiser is, in fact, an alien spaceship.

After hunting around you find a teleporter which instantly transports you to a nearby planet. You then re-appear in what seems like a courtyard with crumbling monuments hiding an alien base. Your job is to explore and then destroy.

As with every Doom game, the norm is for your weapon to dangle feebly at the foot of the screen – and Alien Breed 3D 2 is no exception. The guns have been beefed up so much, you are likely to feel sorry for the beasts you've just happily splattered across the wall.

A feature which will undoubtedly put the finishing touches to a superb game is a level editor. You will be able to design your own levels to play against friends or even upload them to Team 17's homepage so other people can play them.

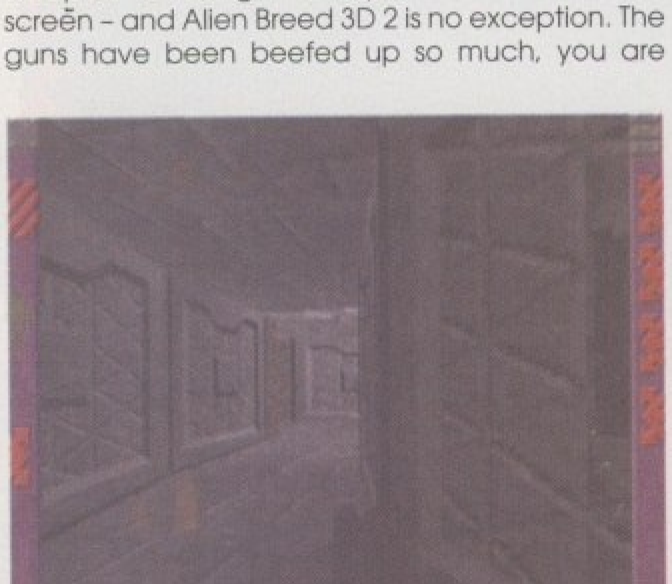
The part you've all been waiting for is, obviously, how it plays and, more importantly, is it better than the original? Well my answer to that question is... yes! From what we've seen the game is looking absolutely superb.

Alien Breed 3D 2 is better than Doom. If you try playing Doom on the PC for half an hour and then play Alien Breed 3D, it will come clear which one is the best. After all, the Doom phase on the PC is slowly passing and it may be time for the Amiga to get in there.

Insight

I have only seen one level so far but it looks so much better than the original, it's difficult to believe they came from the same publishers. Oh, another thing. You don't have to take my word for it either – why not play it yourself. If you hook up to Team 17's World Wide Web page you can download yourself a copy. You won't regret it.

Watch this space for a full review soon. You may witness the coming of one of the greatest games ever on the Amiga.



Can you see the light in the background? Something must be lurking there so be careful!

Reflections

As I've already mentioned, Alien Breed 3D was a huge success and this is exactly the reason for producing the sequel. Team 17 have had time to reflect on what they could have put in and what they could have taken out, so with new ideas in their minds, what is in store in the future?

Alien Breed 3D 2 will incorporate 16 massive levels, with a Lo-res screen resolution for a standard A1200 and a Hi-res 1x1 pixel ratio for accelerated machines. You can switch between resolutions using the numeric keyboard and can also reduce and enlarge the screen size to how you prefer. Also, there will be graphical touches such as light sourcing, gourad shading, and transparent objects which should make for an absolute graphical feast.

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Frank Nord finishes menus off with a look at some of the more useful menu-related tools

medical

Would you like to see the menu?

epilogue

I like the idea of an epilogue for this series on menus. It kind of reminds me of The Invaders with Roy Thinnes or The Fugitive with David Jansen, the way the program would always be divided into three parts and an epilogue. Well, this is where I'm going to tell you about how to get the most from your Workbench menus now that you know what they all do. All the programs that help with menu use are thankfully shareware of one sort or another, unlike the utilities I have seen for the Mac which can do the same as Magic Menus, but retail for eighty quid.

Starting points

So what shall we start with. Well, how about Magic Menus since I've already mentioned it. This was written in the dim and distant past by Martin Korndörfer and it still performs brilliantly. In case you've never seen it, Magic Menus allows you to get your menus without having to move the mouse up to the top of the screen. Instead, your menu titles appear in a vertical block and by moving the mouse over them, you can open the menus, submenus and so on. You can configure the way it looks and whether this affects normal menus (when your mouse does travel up to the top of the screen). The only problem with Magic Menus is that some programs (like DPaint) that patch right mouse button functions can have problems with it. However, getting the esoterically-named NewObtainGIRPort should sort out those troubles.

Next up is a MUI program called ReKeyIt. ReKeyIt allows the user to replace the keyboard shortcuts used for Workbench's menu items so that instead of Right-Amiga A being 'Select All', it can become the far more useful 'Snapshot > All'. Likewise, Right Amiga U can stop being the shortcut for 'Unsnapshot', a function I very rarely use, and become the shortcut for 'Update' in the Window menu, which I use on a daily basis. Fortunately for those that only have a small amount of memory, ReKeyIt doesn't have to load any of the MUI libraries unless you are actually in the process of changing your preferences. And so we go on... Next we have two competing commodities – the small but perfectly formed MCX and the larger, but also perfectly formed MCP. Now, I prefer MCX's smallness. Okay, it's not so easy to configure, you have to change cryptic tooltypes to be able to alter the settings, but it takes up very little memory.

By contrast, our coverdisk editor, Neil, prefers MCP because it offers more configurability, more options, but thus also takes more memory. Of course, like ReKeyIt, you don't have to load MUI's libraries if you don't edit your settings. MCP also offers things like ToolAlias, screenmode promoter, and various other tools that would be quite difficult to configure through tooltypes with MCX. Both help you with menu-related Workbench operation by allowing you to copy and paste text into the text requesters that appear when renaming or executing a command, among others, and MCX beefs up the Info requester in the Workbench menu as described in this column a couple of months ago.



ReKeyIt and SwazInfo are two of the most helpful Workbench commodities to do with actual menu operation. The 'Select drop action...' window appears when you drag and drop an icon into SwazInfo's main window area (rather than either the icon or tooltypes areas)

And finally...

But wait, don't go. There's more. We're onto the biggies now. The two utilities that expand the Workbench tools menu, ToolManager and Toolsdaemon, are indispensible for serious Amiga users. ToolManager, in its current form at least, is a somewhat overcomplex commodity that adds new items to your Tools menu. You can have animated docks, sound effects playing when you start tools, and on and on. I still use the very old ToolManager v1.3 which doesn't have any of those bells and whistles, but is easier to set up and doesn't take as much memory.

Toolsdaemon doesn't add anything to your Tools menu. It allows you to create as many new menus as you like (or that can fit on your screen) with or without submenus. Both programs make full use of Workbench's drag and drop facilities, so you don't need to laboriously type in paths to your programs – all you need do is drag the program you want to add to your menus into the interface window for either program. SwazInfo is another utility often mentioned within these hallowed pages. It replaces Workbench's information requester when you hit Right Amiga I, or select Information from the Icons menu, and improves on it considerably.

One of the handy things it does is supply you with information on how much data is contained in a drawer. This isn't wholly accurate, but at least provides a guideline – handy for people copying files to floppies. SwazInfo also provides drag and drop facilities for replacing icon images or tooltypes by simply dragging the desired icon image or tooltypes into the appropriate section of the information window. SwazInfo helps you edit those pesky tooltypes too. You know how you can disable tooltypes sometimes by putting brackets around them? Well, SwazInfo has an automatic bracket thingy to do this for you.

There are almost certainly more tools and commodities that can help you with menus, but these are the ones I use the most. You should be able to get any of these commodities from your local friendly PD dealer and they are all available on Aminet.

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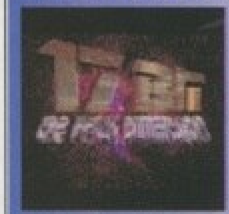
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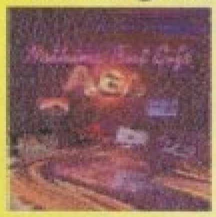
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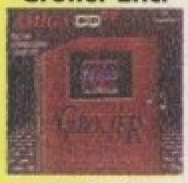
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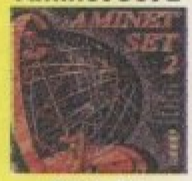


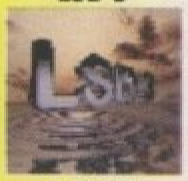
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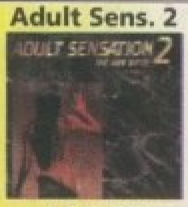
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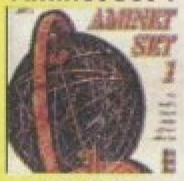
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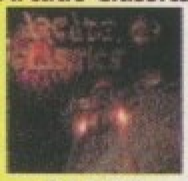
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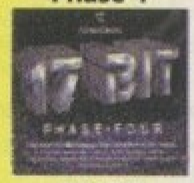
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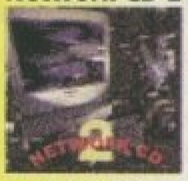
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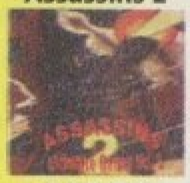
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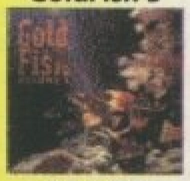
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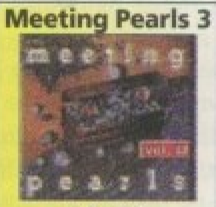
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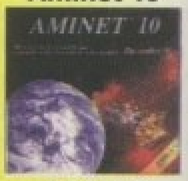
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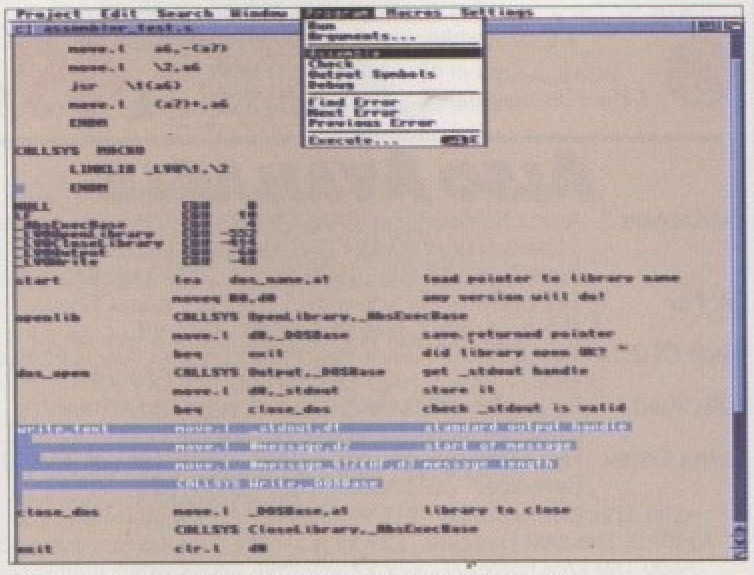
assembler

Starters orders

People often ask how they can get started with 680x0 coding on the Amiga, so this month I thought I'd spell out a few ground rules. First and foremost it's important not to be put off by what you've heard about Assembler coding. The 680x0 chips used in the Amiga have instruction sets that are quite limited and there is nothing inherently complex about their operations. Each instruction carries out some simple task, perhaps adding two values together or copying the contents of one memory location into another.

The real problem is not the 680x0 instruction set – it's the Amiga's O/S (operating system) itself. Learning about this is a challenge simply because there is so much to understand. There is no easy road... you've just got to sit down and work at it and, even with the right documentation, it takes ages (having said that it is real good fun).

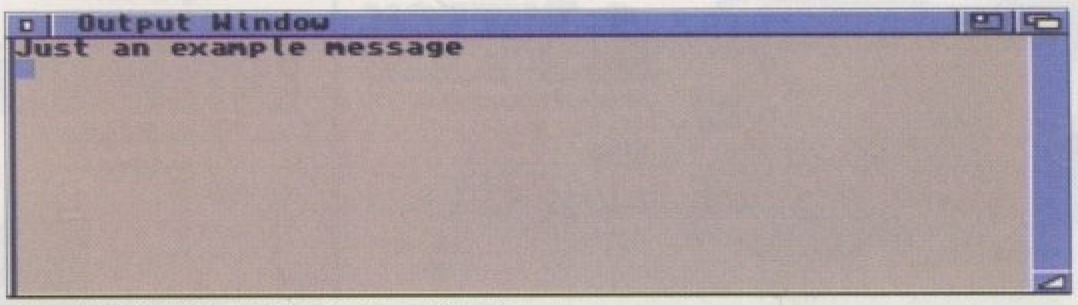
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ADVENTURE TIME

Once you've got the hang of re-assembling the example you might also want to modify it so that it prints a number of text messages using a loop. With the fundamentals of Shell output out of the way you will then be ready to move on to something a little more adventurous. When you start Amiga coding proper, incidentally, you are likely to need the official Amiga includes. Next month I'll be explaining why it's worth having the Amiga Technologies versions as well as those provided with your assembler!



The output from this month's example program

program never works like that – the best approach is to get stuck in and then learn as you go along. But, and it's a big BUT, there is absolutely no point struggling with Amiga-specific issues until you have some basic ideas of what 68k coding is all about. Therefore, your initial priority should be to get a reasonable understanding of a few common 68k instructions (such as the move instructions which are used to copy data between registers and memory).

You should also aim to eliminate as many of the Amiga-specific problems as possible in the early days and you can do this by writing general, as opposed to Amiga-specific, example code. Non-Amiga specific Amiga coding? Sounds like a contradiction in terms until you remember that many small test programs will contain nothing in the way of Amiga-specific material at all. The following example for instance, though it contains just two instructions, will happily run from a Shell window and load register d1 with the value $40 hex:

```
start:     move.#     $40,d1
           rts
```

If this code is assembled into executable code it will run, although you won't see any visible output! What you can do, however, is execute these types of beginners programs (examples of which can be found in all introductory 680x0 programming books) using a debugger. HiSoft's Devpac, for instance, can assemble such test programs and run them using the MonAm debugger – and with MonAm's help you'll be able to see the effects of various microprocessor instructions as they are executed.

Similarly, short test programs will enable you to experiment with things like program loops, decision tests, and so on. Now this may not seem like real Amiga coding, and to be honest it isn't, but it's a useful initial stage because it lets you play around with 68k instructions whilst avoiding the Amiga-specific nasties that produce pitfalls in the early days.

Once you've got a few weeks of practice under your belt and are happy with moving data, calling subroutines, making decision tests, and perhaps some understanding of the ways in which information is passed to, or collected from subroutines, it'll be time to move on to the next stage. If you think this might start involving Intuition or Amiga graphics coding then you're being a bit optimistic – in fact you've got a long way to go before they appear.

The best next step is to concentrate on writing some Shell-based Amiga programs that use the Shell window as output. These will doubtless be a little more involved than your early efforts but, as Amiga programs go, they will still be relatively simple.

In order to send text back to the Shell window that started the program you need to identify the output handle (known conventionally as _stdout) of the Shell process. It's not a difficult job and basically all a program needs to do is open the DOS library, and then make a call to the DOS Output() function. You may find that the standard Amiga startup-code (which will be provided with your assembler) will actually open the DOS library for you, but if not don't despair – it's not a difficult job.

Once a _stdout handle is available you can use another DOS call, Write(), to send data back to the Shell. Opening libraries, making library function calls, and printing text back at the Shell is easy once you've seen it done once, and you'll find a small example on this month's cover disk. The source code version, called assembler_test.s, has an icon which uses ed as the default tool for displaying the file. The runable version, assembler_test, doesn't have an icon so you'll need to use the Show all files Workbench option to display it.

Have a look at the code and try changing the text message and reassembling the example. If, incidentally, you are already a C programmer then you are, of course, duty bound to change the text of the program from:

```
dc.b 'just an example message',LF
```

to this C classic:

```
dc.b 'Hello World',LF
```

Paul Overaa offers some notes about reading and writing lines from text files

arexx

Flexible friend

In keeping with many modern languages, ARexx supports only a simple file I/O model, but despite its simplicity it has proven to be both useful and flexible. This is particularly so when it comes to text files which need to be read or written on a line-by-line basis. Once a file has been opened there is a function called Readln() which can read characters from a file until it finds a newline character (the newline, however, is NOT included in the returned data). In other words we can read a text line from the file using:

```
line$=Readln(filehandle)
```

Another function, Writeln(), allows you to write a line of text. Writeln() appends a newline character at the end of the string and the call itself has this type of format:

```
character_count=Writeln(filehandle, line$)
```

where the returned value indicates the number of characters written.

With any sequential file read operations it's necessary to know when you've reached the end of the file, and the ARexx function used for this is EOF(). Since such tests are normally carried out as part of a series of loop operations, most coders tend to use the NOT (~) operator and write the end-of-file test as part of their loop exit condition like this:

```
while ~EOF(filehandle)
          do
          /* do something */
          end
```

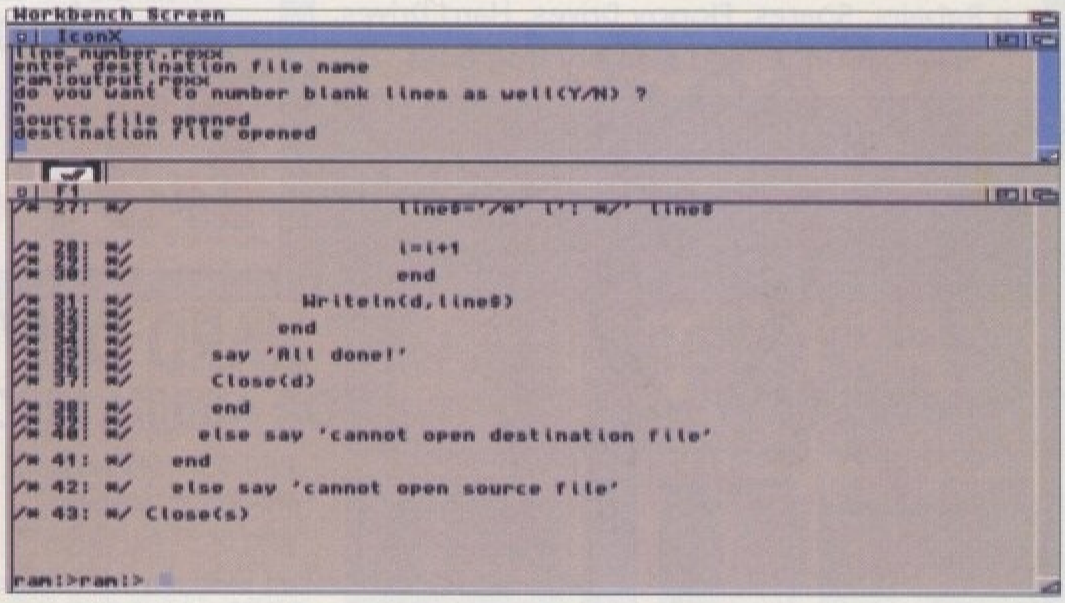
If the returned Boolean result is 1 (i.e. true) then the end of the file has been reached!

Programs which use loops to read all the data held in a file will usually arrange to read from the file until the EOF() indicates there is no more data to read using a framework based on:

```
if Open(s,source_name$,'r') then
          do
          if Open(d,dest_name$,'w') then
                    do
                              do while ~EOF(s)
                              /* do something */
                              end
                    Close(d)
                    end
          end
Close(s)
```

What you actually do with the lines being read is up to you but if, for instance, you wanted to create a script that could add line numbers (surrounded by /*... */ comment markers) to an ARexx program, this sort of inner while loop would do the trick:

```
do while ~EOF(s)
                    line$=Readln(s)
                              line$='/*' i': */' line$
                              i=i+1
                    Writeln(d,line$)
          end
```



The results of using the line numbering macro on the line_number.rexx script itself!

I've used a loop similar to this to create this month's example line numbering script. You will see when you examine the code given in listing 1 that I have added a slight twist by providing a Yes/No mode flag which allows the script user to choose whether line numbers are added to blank lines or not.

The script is very easy to use. Just provide suitable source and destination file path/names, indicate whether you want blank lines numbered as well, and the program will do all the hard work for you. You will, incidentally, find a runable version of the script on the coverdisk. It can be executed either by using RX from a Shell window or from the Workbench (via IconX) by double-clicking on the 'DoubleClickToRunFromWB' icon!

If you just want to use this script to add ordinary line numbers, as opposed to the /*... */ comment delimited ones needed for ARexx scripts, then just change the line which reads:

```
line$='/*' i': */' line$
```

to this...

```
line$= i': ' line$
```

```
/* line_number.rexx */
say 'enter source file name'; pull source_name$
say 'enter destination file name'; pull dest_name$
say 'do you want to number blank lines as well(Y/N) ?';pull mode$
if Open(s,source_name$,'r') then
          do
          say 'source file opened'

          if Open(d,dest_name$,'w') then
                    do
                    i=1
                              say 'destination file opened'
                    do while ~EOF(s)
                              line$=Readln(s)
                                        if (Length(line$)>0) | (mode$='Y') then
                                                  do
                                                  line$='/*' i': */' line$
                                                  i=i+1
                                                  end
                              Writeln(d,line$)
                    end
               say 'All done!'
               Close(d)
               end
          else say 'cannot open destination file'
     end
     else say 'cannot open source file'
Close(s)
```

Listing 1: The example ARexx script line numbering macro

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** NEW OPENING TIMES ** STARTING NEW YEAR 1996 ** NEW OPENING TIMES

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Phil South ponders the latest in Internet communications and hopes the Amiga can keep up

comms

Net Speak

The news is that in Germany, at least, the first big Amiga Internet pack is on the way. The AMIGA Surfer pack is billed as the "first true Internet Computer in the market", and whilst you can quibble about whether that should be 'in' or 'on', the fact remains that the Amiga is uniquely suited to Internet uses and has been remarkably underused in that capacity so far. The pack consists of a fully equipped Amiga and a set of Internet tools for a total price of DM1,199 including 100 free on-line hours of a value of about DM700, which is a special offer in conjunction with IBM Global Network.

The 'complete solution' contains an Amiga 1200 with hard disk, a 14,400 fax/modem, and a standard suite of productivity and Internet software. The Internet software includes a browser for the World Wide Web, an FTP program for file transfer within the net, an e-mail program for electronic mail, and an IRC program for world-wide live on-line discussions.

The hardware part of the deal comprises of an Amiga 1200 with 2Mb of RAM, a fax modem, a telephone connection cable, and a power supply. The productivity software included is the standard Magic Pack, but, of course, the most interesting part is the added Internet software in the Surfer bundle which includes a PPP driver, the TCP/IP stack 'I-Net 225', the Web browser called Mindwalker, the graphic interface e-mail program VooDoo (with MIME support! Yipee!), the FTP program AmiFTP, and an IRC program called AmIRC. The pack also contains MultiTerm SE and MultiFax light.

Falling behind

This all sounds wonderful but I'm constantly irked about the way the Amiga has fallen behind in the years it was lying fallow. A lot happened on the Internet whilst the Amiga was sleeping, and client software has become a lot more complex and sexy in the interim. A case in point are the rash of Internet Phone programs currently available on UNIX, PC and Mac platforms.

These programs allow you to phone another user via the Internet, thus making an International call anywhere in the world for the price of a local call to your Internet POP. Although we all have the same Internet connections as a PC user, for example, we can't call anyone up as the software to do so doesn't exist. Yet. Another example is the CU-SeeMe project launched by Cornell University. Using a simple £75 gizmo called the QuickCam, produced by a company called Connectix, you can see another user, and if your Net connection is good you can also hear them. It's an Internet video phone! Now this is the coolest use for the Internet I've seen recently, and can I do it on my Amiga? No I can't.

The QuickCam is a simple parallel port device so it should be possible for someone to write some software to support it. Perhaps someone (I nominate Amiga Technologies) should make Connectix an offer to produce the Amiga version of the driver software and get the source code of CU-SeeMe from Cornell University and make this a revolution we can all join in. The same goes for Internet Phone. This is a software-based technology, and it should be easy to transport it to the Amiga. The code already exists on a 680x0 based platform, i.e. the Mac, so the port should be a matter of great simplicity. All that is needed is for someone to care enough about the Amiga taking part in these new developments to do something about it.

My point is that porting these things to the Amiga would be simple, and there are so many Amiga users out there who use and enjoy the Internet that the market for a simple device like this should be large enough to make companies take notice. Although many of these developments are software based, some require a little hardware. Also, a way of connecting a microphone and headphone to the Amiga would, perhaps, need to be looked into. Obviously, you could just plug a headphone into your monitor and put a line into an Amiga sound sampler, but perhaps a new bit of cheap hardware to make it attractive would be a good plan. A little headset like those used by telephonists would be cool too. And price? Well make the QuickCam the normal PC/Mac price of £75, make the phone headset hardware cheap, like £15-25, and throw in the software for free. It's a plan, right?

I don't know if Amiga Technologies are aware of the immense importance of this kind of communications in the future, especially when Cable Companies are putting free local calls at certain parts of the day into the hands of normal citizens all over the country. Imagine – you could phone anywhere in the world and talk for hours for free. That would be cool wouldn't it? Let's lobby Amiga Technologies for a policy on this new technology and ask them to talk to the relevant parties to try to hammer out some kind of a deal, eh?



CU-SeeMe is available for the Amiga – but only in a passive playable version

On your travels

By the way, on the subject of the Amiga and the Internet you should really check out the new Amiga Web site on http://www.amiga.de. Although a lot of it is in German at the moment, the English parts of the site are growing fast. Look forward to a full review of the site in the next column.

Contact

Amiga Technologies
http://www.amiga/de
Connectix
http://www.connectix.com
CU-CeeMe
http://cu-seeme.cornell.edu/
Internet Phone
http://www.vocaltec.com
Speak Freely
http://www.fourmilab.ch/speakfree/windows/speak_freely.html

Continuing the discussion on computer graphics in print with Frank Nord

publishing

Key issues

So you've all gone and bought memory upgrades to cope with the new larger-sized images you are rendering for print then, eh? Unfortunately, larger images are not the only criterion when creating pictures for print. The main thing that needs to be taken into consideration is the large difference between transmitted colour and reflected colour – the difference between looking at a picture on your monitor and one printed on paper.

One of the things that has to be borne in mind is the inability of the different colour methods to accurately represent various colours. While RGB is excellent for a wide range of reds and blues, it isn't very good at yellows. CMYK, by contrast, is a bit lax when it comes to showing the range of greens that RGB is good at.

This is a problem if you are dealing with images that will be going to a professional printer because he will need to change your image from its natural RGB status to a CMYK-capable format like TIFF in order to be able to print it. Oh, don't worry, he'll be able to convert it, that's no problem. The problem comes if you've set your heart's desire on a very definite range of colours.

Saturation point

Just like working with images intended for video, RGB images are quite often too saturated for print work. Because the colours in printing are made by laying down more colour the darker you want the image to be, very bright greens, reds and blues are hard to achieve because they need the mixing of at least two of the four inks to represent, thus making them darker than desired.

This contrast between what you want from your image and what you can achieve is called the gamut and, like over saturation in video images, it's a no-no to exceed it. Most software that printers might use for converting images to CMYK can actually handle the changes in colours required to bring the image within the gamut range of the CMYK colour method, but this can result in a dull image. With a colour critical image it's probably best, if you are giving your work to a printer, to insist on a colour proof or to at least see the image on his screen in the form it will take before printing, just to make sure it doesn't deviate too far from your original vision.

So what can you do about this? Unfortunately, not a lot. Because of the Amiga's bias towards graphics for video use, the printed output side of things has been pretty much ignored. In my fairly wide experience I have not come across any way of converting an image to CMYK in a form that can still be edited and saved out in an appropriate form on the Amiga, so you'll have to rely on other people's interpretation of what your picture should look like – at least, that is, until Photoshop becomes available...



Any excuse for a picture of Sandra Bullock, I hear you cry

Are you giving me the runaround?

I've had a few letters from people asking me how to get runarounds working properly. It seems most of you are happy to use the standard runaround tools provided by most word processors or DTP packages, but these tend to either just offer a box-type runaround, or are hopelessly inaccurate in the way they choose to runaround. The simple answer to your problem is to use vector graphics to outline your bitmap, as these tend to give the best runaround results. Simply import your bitmap as normal, but instead of turn text wrap on immediately, make sure your column of text doesn't butt up against the image.

Next, choose your draw tool, it might be named differently in your package, but you need the tool that allows you to draw a continuous line with points along it that can be re-positioned. Then draw a line following the edge of the image you wish to wrap your text around. Don't worry about the colour of it at the moment, just keep clicking so that your line follows the edge of your image. But don't click so much that you end up with a point at every pixel, you'll be wasting your time. Next, change the colour of your line to transparent or white and make sure it is brought to the front. You will also need to make sure text runaround is set. Now bring your text box over your image and see how it looks. In our example pictures we have some of the text over a coloured background, but it would probably be best to massage such images so that there is no colour where your text is, unless you want that as a deliberate effect.





In the last part of this guide to multimedia, Phil South looks at animated buttons and sounds

Perfect buttons

part 3

Last month we talked about making things happen by using the mouse, and now we'll look at making buttons animate so that the user gets a bit of feedback for his mouse click.

You'd be surprised how many Amos programs omit any kind of feedback, that is to say a visual or audible cue to confirm that a mouse click has been made and accepted. If you make your buttons with Amos drawing commands this couldn't be easier. Let's take our example program from last time and add animated buttons.

```
Reserve Zone 3
Set Zone 1,10,10 To 30,30 Set Zone 2,35,10 To 55,30
Set Zone 3,60,10 To 80,30
Curs Off : Cls 0
Ink 2 : Bar 10,10 To 30,30
Ink 8 : Bar 12,12 To 30,30
Ink 7 : Bar 12,12 To 28,28
Ink 2 : Bar 35,10 To 55,30
Ink 8 : Bar 37,12 To 55,30
Ink 7 : Bar 37,12 To 53,28
Ink 2 : Bar 60,10 To 80,30
Ink 8 : Bar 62,12 To 80,30
Ink 7 : Bar 62,12 To 78,28
Pen 2 : Paper 4 : Locate 0,8 : Print "Click the
above buttons to make a noise."
Do
```



AMOS's sample editor is not the best there ever was, but it is, at least, integrated into the programming environment, making it easier to incorporate sampled sound into your multimedia production

```
    Z=Mouse Zone
    C=Mouse Click
    If C<>0 and Z=2 Then Boom
    If C<>0 and Z=3 Then Shoot
Loop
```

The basic listing sets up the zones and senses when a mouse click has occurred. This time if we reverse the white and dark grey colours on the button it'll seem as though the button has been inverted.

So for each button we need to do a redraw each time the button is activated. So after the button is pressed we redraw it with the colours reversed, wait for half a second, and then redraw them the way they were, as in this example for the first button:

```
If C<>0 and Z=1 Then Bell : Ink 8 : Bar 10,10 To
30,30 : Ink 2 : Bar 12,12 To 30,30 : Ink 7 : Bar
12,12 To 28,28 : Wait 25 : Ink 2 : Bar 10,10 To
30,30 : Ink 8 : Bar 12,12 To 30,30 : Ink 7 : Bar
12,12 To 28,28
```

We only reverse the white (colour 2) and the dark grey (colour 8) colours and leave the body of the button (colour 7) as it is. After a wait of 25 clicks (half a second in new money) we redraw the button the way it was, as if the button pops down for a second and then pops up again.

It's easy to rewrite all this information onto the end of the line as you simply do a block copy and paste with the code from the original lines which drew the buttons in the first place. This saves having to laboriously retype all the data for the buttons, but it also avoids any mistakes in the data if it is identical.

Sound sense

It's tempting to use the built-in sounds for all your Amos programs, mostly because the sounds are right there and the commands are simple. Type BOOM, BELL or SHOOT and you are there. I always use them in examples because they are so easy, but you can add other sounds to Amos very easily.

Sound sampling has always been an easy technology on the Amiga. Most of the hardware you need to grab sounds is built in to the system, and with the addition of a simple I/O box you can sample 8-bit sound into the Amiga directly. To use your own samples, like a button on a computer keyboard being pressed, you have to pack the samples into a sample bank (Amos Bank or ABK file), which can be loaded into an Amos program from where the samples can be played back at any time in the program using the SAM PLAY command. Using:

```
SAM PLAY 1
```

for example, you will play the first sample in the bank. For really interesting multimedia with the minimum of sounds you should steal a trick from the arcade game coders and play back a sound at different speeds, thereby doubling and tripling the amounts of uses you can put a single sample to. Use the:

```
SAM PLAY 15,1,1000
```

format where 15 = maximum number of voices for best sound quality, 1 = sample name from the bank, and 1000 = samples per second, with 1000 being around the lowest and 30000 or more being the highest. The only way to tell what different speeds will do to your samples is to try it and see. You'll be surprised at the amount of ideas this will give you.

Use your intuition

One last thing. I've reviewed a lot of extension add-ins for Amos over the years which make the program access the Intuition libraries. Don't neglect Intuition-based programs in your search for the perfect multimedia app. (One such extension is reviewed in this very issue, in fact.) Multimedia doesn't have to be carried out on custom screens using Amos, but can be made perfectly transparently with Intuition, and sound samples and other additional multimedia bits can be added. If you are really clever you can even interface the Amiga with other devices to make your Amiga truly multimedia. But that's up to you and how much code banging you want to get involved in. All the relevant data for taking this further is in the Amos manuals and the various hardware reference works.

Back to our normal transmissions next month when we'll be learning how to make Amos do all sorts of clever tricks again. I'll be delving into my Amos notebooks to remind you of a few little tricks which are not in the manuals and showing you easy ways to make tricky things possible. See you then.

Paul Overaa gives you bad and good news about recent events in the Amiga music scene...

music

Faulty pipework

Everyone connected with the Amiga music scene has been disappointed by the recent news that Blue Ribbon Soundworks, of Bars & Pipes sequencer and SuperJAM fame, are pulling out of Amiga software development. Pulling out is not quite the right word – they've been head hunted and bought by Microsoft to develop software for the PC market place. Now, if that's not a back-handed compliment for Amiga music software developers, I don't know what is.

A few Amiga pundits are regarding the loss of Blue Ribbon Soundworks as not only a catastrophe in the music sense but as yet another indication that developers are leaving the Amiga platform in droves. Blue Ribbon Soundworks is certainly a loss the Amiga could have done without but it's not the end of the world because, as far as any future development was concerned, it is hard to imagine what else could possibly be added to a sequencer like Bars & Pipes!

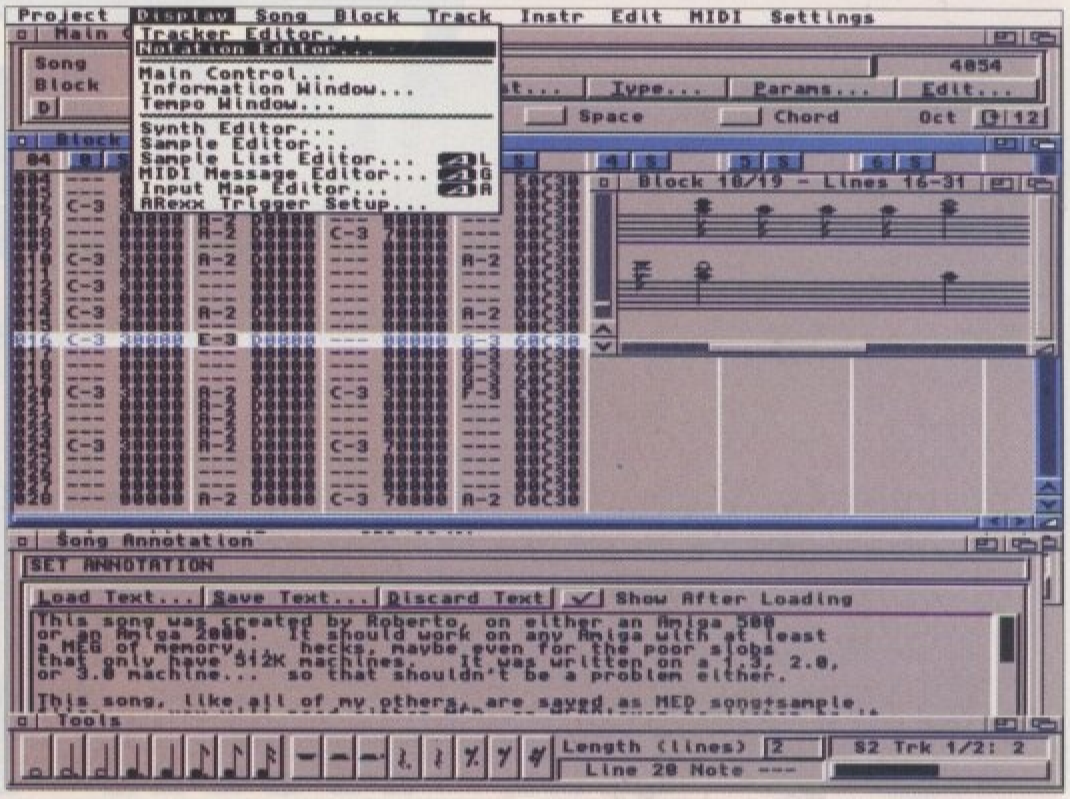
The underlying reasons for any developer leaving the Amiga are two-fold – money, and worry about the future survival of the machine. After the recent Commodore Amiga fiasco, everyone knew it would take time for the Amiga to re-establish itself. During this time most Amiga developers have had a hard time and it's little wonder that some have thought it safest to move to other areas.

Hard times

Now whilst the real blame for the current mess the Amiga finds itself in lies fairly and squarely with the Commodore Amiga bosses, indirectly the loss of certain key developers has actually been our fault – yours and mine. What's happened, of course, is that whilst we've all waited for good news about the Amiga, none of us have been rushing out to spend money on things for their Amiga. Understandable of course – but companies selling Amiga software or hardware add-ons need people to buy things to survive. If they don't they either move to different pastures (like the PC) or go under!

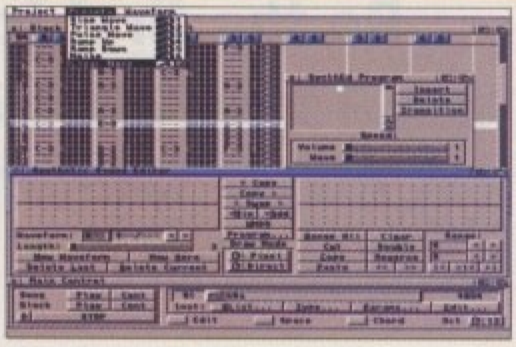
The Amiga, albeit slowly, is now again on the move. Amiga Technologies, though, not getting everything right, are trying hard to do their bit (even in these still relatively early days). What they don't need, however, are Amiga owners going around talking as though the end is nigh. In some respects you dedicated Amiga owners hold the key to the Amiga's successful re-emergence just as much as Amiga Technologies. The key is in your pocket – so if you can afford to go out and buy software and hardware add ons then don't think about it, do it!

If cash is tight you can still help by spreading the word about just how good the Amiga is. Be fanatical – just like early Amiga users were when the machine first appeared with the then stunning 'Juggler' demo!

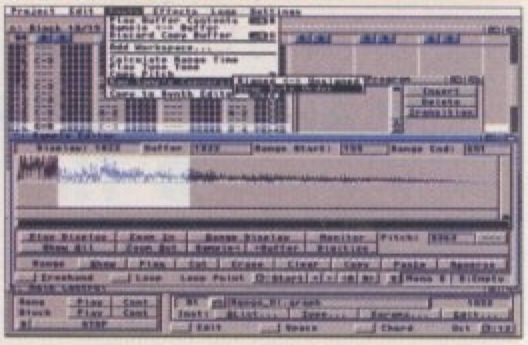


The new Sound Studio program is going to be one good reason for sticking with the Amiga!

OctaMED Sound Studio



SoundStudio with the synthetic sound on display



A whole host of new sample editing facilities are being added to the SoundStudio program

On the brighter side I've recently received a Beta test copy of the OctaMED Sound Studio. Now whilst OctaMED 6 is already without doubt the best tracker program available on the Amiga, it is immediately clear that the new Sound Studio package is going to surpass it in all respects, and one of the most significant and exciting new features will be the new player mode called '1-64 Channel Mixing'. This mode can handle up to 64 virtual channels and is mostly independent of what kind of audio playback hardware is available (allowing easy support of different sound cards).

Existing OctaMED users are going to get special deals on the program when it arrives later this year so, if you've not already done it, the thing to do is buy OctaMED 6 now and upgrade to the Sound Studio when it arrives! OctaMED 6, incidentally, is also now available on CD and this has made it possible to include a whole host of extras with the CD version.

As well as OctaMED 6 itself you'll get literally hundreds of tracker modules, over a thousand sound samples from the Walkabout Music sounds library, Midi files, and a variety of doc files and OctaMED related utilities.

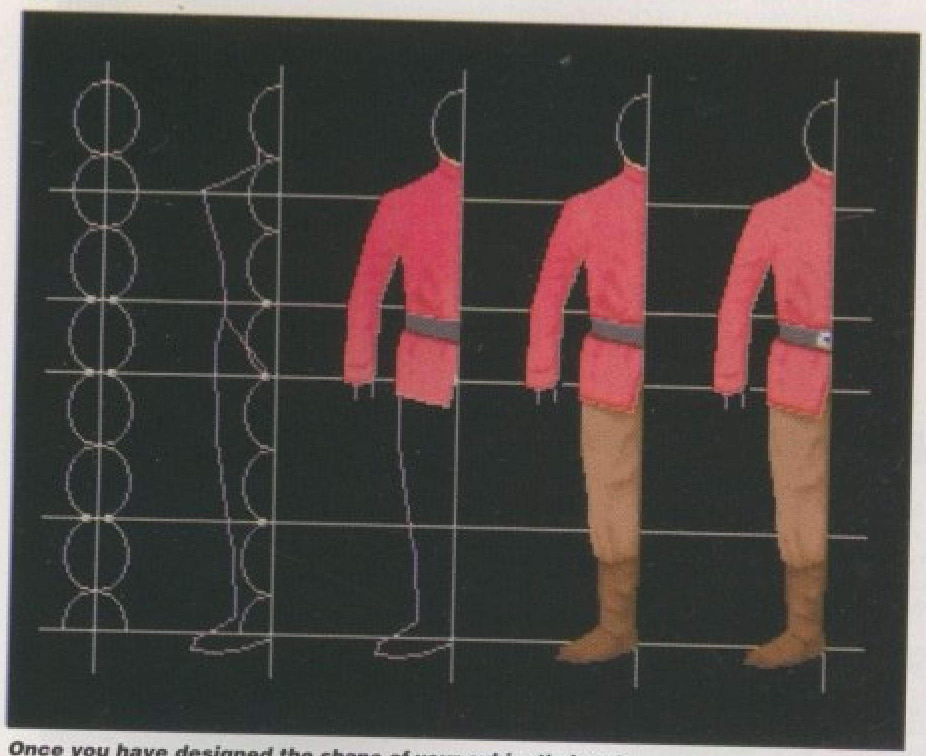
The Official OctaMED 6 CD also comes with a printed OctaMED 6 tutorial manual so if you have a CD-ROM drive, and are looking to get into music-making on the Amiga, this particular offering is a good way to start!

OctaMED 6 is available on disk for £25 from RBF Software – 01703 785680 – and on CD for £29.95 from Weird Science – 0116 2340682.

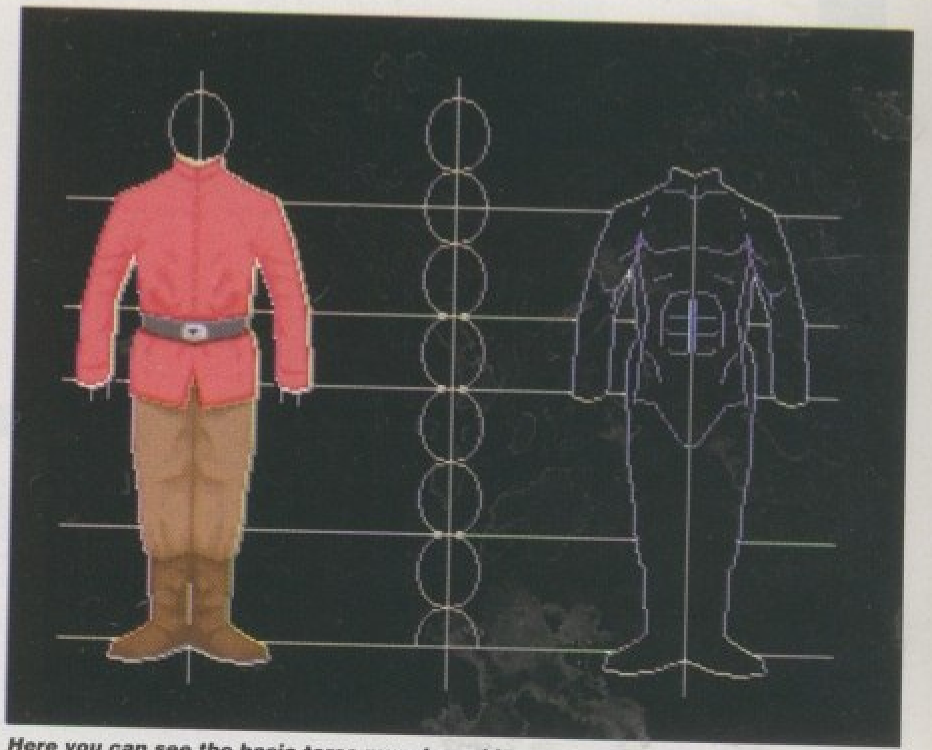
Play God and master the art of drawing the human figure. Steve White gives you the head start you need

2D paint

The anatomy of man



Once you have designed the shape of your subject's head you can use it as a template for the rest of the body



Here you can see the basic torso muscle and bone structure of a rather clichéd male form. Tone down or enhance these features accordingly

Last month I described the principles behind the design of a human head. To complete this look at human anatomy, this month I will be explaining useful hints and tips on how to create realistic looking figures – that's the neck down.

The principles underlined last month also work for designing the human form. In fact, the head is a great starting point. The human form is approximately six and a half heads in length with certain positions used to mark body features such as the knee, elbow and waist. Therefore, the best place to start is to grab the head circle and paste it down below the original head six and a half times.

With frontal views, and providing the subject matter is not moving, you really only need to design one side. After finishing the first half you can simply cut, paste and flip it to the other side. After pasting the circles down below the head it is best to trace an outline of the main torso and legs – arms, hands and feet can be added later on.

The shoulder and top of the arm should meet at the middle of the first circle in the actual body, the groin should end at the junction between the third and fourth circle, and the knee should, approximately, be in-between the fifth and sixth circles. You can adjust these positions slightly but try and keep as close as possible to the guides.

Next you can add the arms. The elbow should come between the second and third circle and the hand starts between the third and fourth circle alongside the groin – if you want proof stand up and try it. A common mistake with the arm is to bring the shoulder out too far. Keep the point where the shoulder meets the arm in line with the widest point on the thigh. If you follow this procedure you'll find that the armpit point can be placed accurately, using only the width of the arm as a reference.

As for the hands, leave them until last. Hands and feet are certainly one of the most difficult elements of the human form to design on a computer – making them look realistic is even harder. Don't get bogged down in detail. Finish off the main body first and then add the more intricate parts at the end.

With the main body structure complete you can then begin to add clothing (if any). Although this article is really only concerned with the human form, it is worthwhile mentioning clothing as it can make or break a figure. The shape of a body is fairly static, but add clothing and shape and form become a little more chaotic.

Dressing up

The trick to drawing realistic looking clothing is to understand the fabric and shape of the body underneath. This all sounds a little highbrow but believe me, the more of an understanding you have of the subject matter, the easier it will be to emulate it on the computer.

Clothing will react to the position of the body underneath. If an arm is raised the clothing will pull towards that point, and in a relaxed posture the clothing will sag. If a belt is worn it will pull and crease the garment it is over. You can add folds in the cloth by drawing darker shades below and lighter shades above. Try and think of points on the figure where clothing would crumple and fold up – the armpit for example and the groin. If you need more of an example, stand in front of the mirror and note the way your clothes fall – tight clothing will have sharper pulls and thinner folds, while baggy clothing will have loose and large folds with plenty of creasing. If you use the split method – drawing only one half of the body first and then flipping the other side – make sure you change the clothing so that it doesn't look like a simple flip.

If you're body is naked or partially clad then your design work is going to be a great deal harder. Understanding muscle and bone structure and how they affect the look of a body is incredibly difficult and takes a long time to master. However, we all have to start somewhere and, therefore, I have outlined the basic muscle form of a somewhat clichéd male form. I will be describing muscle and bone form in a later article but for now I recommend you visit your local library and try and find books on anatomy. Although the subject matter can be daunting, understanding it will make your design tasks a great deal easier and more fun. You will also be able to experiment with movement and action scenes.

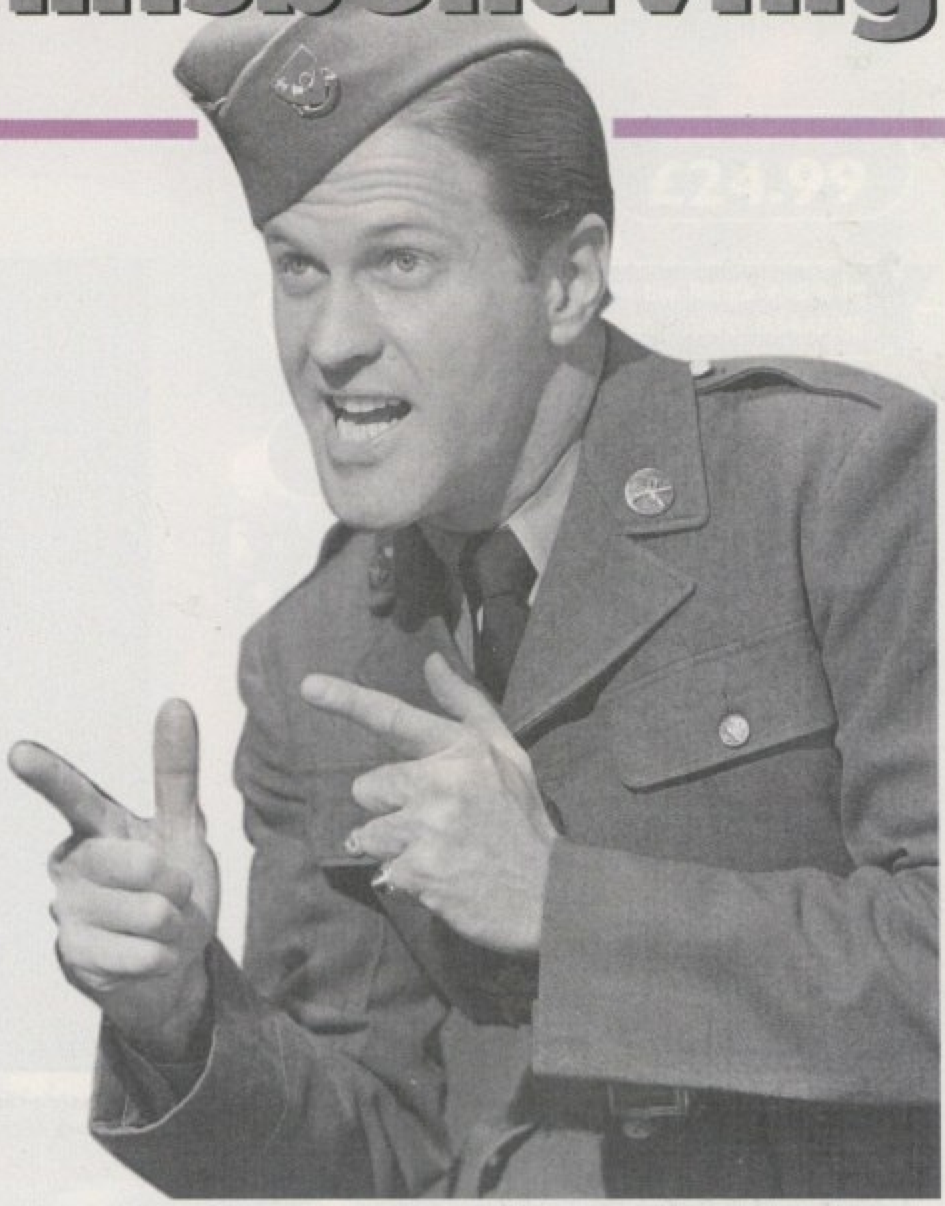
Murphy's Law even affects you when you work with video as Gary Whitely discovers

video

Ain't misbehaving

Now that winter has released its icy grip, the days are getting longer and spring is once again in the air, I thought I'd share a few strange, true and strange but true things which tend to happen again and again in video. Maybe you would be as well to bear some of them in mind while you're dusting off the video camera and edit suite in preparation for the longer days to come, and this year's video productions to get under way.

Let's start with some of the true (and sometimes silly) things which can happen during video editing and production. It's always infuriating when you can't get an edit suite to do what you want, and even worse if there are bits of kit which look like they might be potential causes for your problem. But more often than not this 'problem' can be quickly traced to one simple thing – your edit videotape is protected from recording! This means the protection tab in the tape is either missing, broken off, or in the wrong position, depending on the format of tape you use. What's even worse is when you've taped over the missing tab hole and the problem is still there, only to find later that the tape has come unstuck or got dimpled so the VCR still thinks the video-tape is record protected! I've seen these problems happen on numerous occasion, and often to people who should have known better.



Just what does this '50's American soldier have to do with video? – You'd better read on...

Stripping

An equally silly situation is the basis for one of my most embarrassing video moments. I'd been asked to video an important occasion which *had* to run to schedule, and something appeared to have gone very wrong with the video equipment. Everyone was waiting impatiently as I searched frantically for the problem. In the midst of stripping down the U-matic recorder, some wag sarcastically suggested that taking the lens cap off might help. Moral – don't panic. Check all the simple things first before tearing the equipment apart. And then check them again because you're already panicking!

Now for something you might think strange (but which I think is true). Call me insane, but I believe video equipment can be adversely affected by the people who use it. Ten years ago Gavin, the guy who started me out in video, used to stand by our VCRs and stroke them when they were misbehaving or refusing to edit cleanly. Invariably, the edit would immediately be successful. Since then I've noticed, over the years, that there are certain people who just don't seem to 'get on' with video equipment, no matter how good they are at using it. When they're around, video kit seems to break down with an almost unnerving regularity, but for no apparently logical reason. And there are other folks who have a knack of getting the machines working again.

Being nice to your machine is almost crucial. In fact, serious research carried out by, amongst others, the US military has proved a more than significant link between faults in electro-mechanical equipment and particular individuals. We all know people who are 'jinxed' – their light bulbs are always blowing, their car breaks down far too often. If this sounds like you, maybe you should just try being nicer to your machines?

What about those times when you leave a crucial piece of kit somewhere, without which you'd be sunk? Strange but true – we've all probably done it. Let me tell you about a shoot I was working on where we went for lunch in a pub half way to our next location and took the camera in with us for safe keeping. An hour later we were on our way, only to discover we'd left the camera in the pub!! We hadn't gone far and we soon got the camera back, but imagine if we hadn't been so lucky. Our shoot would have been a disaster!

One of the silliest sights I've witnessed is the production crew of a major movie almost grinding to a halt because their mobile telephones wouldn't work in our rugged mountainous location. The local phone boxes almost gave out under the strain. Perhaps it couldn't be helped, but it made a change for a film crew's mobiles to be silent!

Murphy's Law

One of the misunderstandings I often come across is that it's possible to edit direct from and to an edit master, and even do things like fades and dissolves. Well, think about it! How can you possibly read, convert, move, effect, return, convert and re-record video that fast, even if you could replace it into the exact spot it came from less than a 50th of a second ago. On a moving tape? Forget it! I've been hearing inexperienced editors asking why they can't do this, but it never goes away. I guess it will eventually change to "Why can I read Mpeg from my hard disk, change it, and send it back in real time to where it just came from?" Maybe it might be possible, but only when time and space become the same thing.

Contact Point

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Paul Austin boldly goes where everyone goes eventually

3D graphics

Paper to polygons

You can try and fight it, you can say it will never happen to you, but the truth is, just about everybody who's ever bought a 3D package has a bash at a space ship. Over the next few issues I'll be taking you through the whole process from concept and initial design right through to surfacing and scene construction. However, before we embark on this epic journey it's well worth running through the ground rules of translating an all too familiar format into a believable scene.

The first step on the road is put the mouse aside and pick up pencil and paper. The first mistake every new intergalactic newbie makes is to rush headlong into Modeller and instantly start slapping shapes together.

Before you do any designing take a moment or two to think about exactly what you're trying to achieve. Is the ship big or small? What kind of manoeuvres and interaction will your creation be expected to achieve? Is it a bad guy or a good guy?

These are just a few of the basic questions you should ask before you even start thinking about the overall look of your masterpiece. To help you answer them, here are a few basic sci-fi, but more importantly psychological, cornerstones of believable space craft.



A classic example of organics and the look and feel of a predator courtesy of the king of 3D space, our very own Ron Thornton

Design size

The first question is one of scale. Are you designing a huge freighter or just a small fighter? If you're opting for a fighter you'll require an obvious cockpit area to help clarify scale. More importantly, you'll need large control surfaces or wing sections to enhance the feeling of high manoeuvrability. Fighter planes have large swept back wings, therefore viewers expect the same high speed look and feel from a space craft. The fact that a space craft needs thrusters rather than wings has nothing to do with it. A house brick would be just as manoeuvrable as the sleekest body shape in deep space, but that's not the issue – it's all about perception.

The most important thing about a ship's shape is its psychological affect. Remember, you're not just a designing, you're actually delivering a visual narrative. If it looks mean, it is mean...

Next up comes the good guy/bad guy question. If your ship is a bad guy it's got to look the part. Again, this is simply a matter of psychology. Basically, there are two main styling techniques for both large and small scale design. For Freighters/space cruisers the general rule of thumb is that bad guys have a very angular look with sharp aggressive protrusions and a generally more alien appearance. Good guys, on the other hand, are generally more rounded and have a slightly softer, more organic look. When it comes to fighters the differences are usually more subtle, but having said that they tend to be more stringently applied. Basically, good guys tend to be more dart like with large control surfaces and smooth sexy lines. In short, the kind of ship every self respecting sci-fi fan would kill to take for a test drive. Bad guys, on the other hand, tend to opt for a much more predatorial look with undertones of either insects or birds of prey.

Again, this plays on inherent fears in the human psyche. Creepy crawlies, huge vicious flying creatures with fangs and talons. Perhaps the best example of this is the innumerable number of bad guys flying about in ships with down swept, hawk-like wings.

As mentioned earlier, these are simply rules of thumb. Essentially, it's a case of knight in shining armour fights dragon – the only thing you want to avoid is obvious repetition. The acknowledged king of 3D space simulation, Ron Thornton, bases the majority of his designs on food – which given Ron's real world proportions isn't entirely surprising. However, even if you examine Ron's masterful designs, these basic themes still hold true. His baddies, although generally organic regardless of scale, all share an inherent predatorial look, often displaying shark-like fins, squid-like tendrils, or perhaps spider-esque construction. Again, all phobia-inducing premonitions which you certainly wouldn't want to discover swimming about in your bathtub.

Possibilities and practicalities

Assuming you've decided on the nature of your beast, the next step is to think long and hard about practicalities. Will your ship need to dock with others or maybe land on an alien planet? It's absolutely vital that you run through all the possibilities in advance. The one thing you don't want to do is compromise the story telling because your creation doesn't allow for it.

Another all important consideration for most people is polygon count. During the conceptual bit it's all too easy to run amuck designing massively complete ships that cause rendering problems further down the line. What if you need ten ships on screen simultaneously, what if you need to show the ship hurtling over a complex 3D landscape, will your machine take the strain? And if not, what can you afford to sacrifice in the original design?

Next month we'll run through the process of converting your creation from paper into a basic 3D design. In the subsequent issue we'll cover the importance of detail and how best to fake it with the aid of textures.



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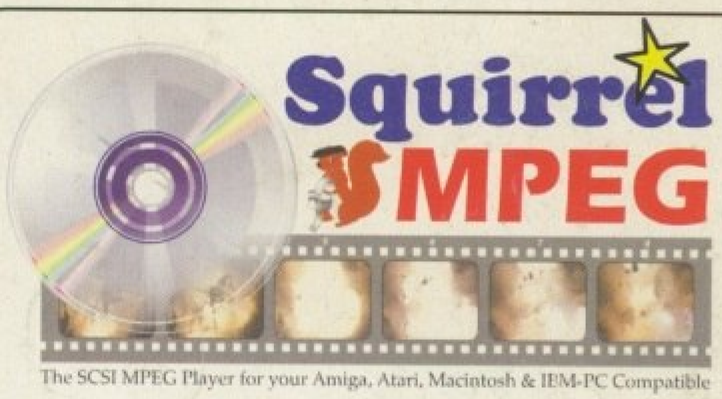
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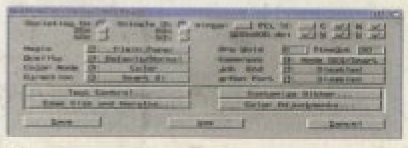
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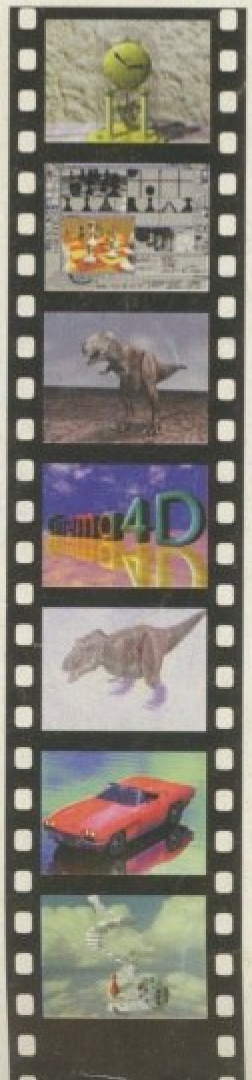
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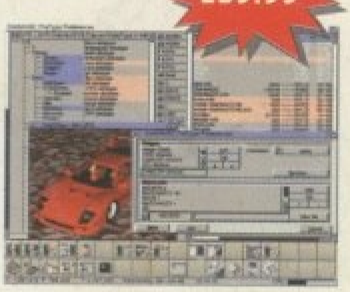
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